City of Saint John
Common Council Meeting
AGENDA

Tuesday, April 19, 2022

6:00 pm

2nd Floor Common Council Chamber, City Hall

An Electronic means of communication will be used at this meeting. The public may attend the meeting in person in the Council Chamber or view the meeting on the City's Website (www.saintjohn.ca) or on Rogers TV.

		Pages
1.	Call to Order	
1.1.	Land Acknowledgement	
1.2.	National Anthem	
2.	Approval of Minutes	
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3.	Approval of Agenda	
4.	Disclosures of Conflict of Interest	
5.	Consent Agenda	
5.1.	Property Assessment Data Use and Confidentiality Agreement (Recommendation in Report)	16 - 21
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5.8. Amending Agreement to Lease 398 with the Saint John Port Authority (Recommendation in Report) 71 - 76

5.9. Engineering Services: Menzies Lake Dams and Access Road Drainage Upgrades (Recommendation in Report) 77 - 81

5.10. Request for Proposals 2022-621001P - Public Space at Market Slip & Harbour Passage Extension - Pedestrian Level Light Fixtures (Recommendation in Report) 82 - 84

5.11. Request for Proposals 2022- 562002P: Public Space at Market Slip and Harbour Passage Extension - Concrete Unit Pavers (Recommendation in Report) 85 - 87

5.12. Proposed By-Law Amendment – Heritage Conservations Areas By-Law (Recommendation in Report) 88 - 89

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6. Members Comments

7. Proclamation

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8. Delegations / Presentations

9. Public Hearings - 6:30 p.m.

9.1. Initiate Stop-Up and Closure for Portion of Chipman Hill (1st and 2nd Reading) 109 - 116

10. Consideration of By-laws

10.1. A Law to Amend a By-Law respecting Water and Sewerage (1st and 2nd Reading) 117 - 121

10.2. Zoning By-Law Amendment with Section 59 Conditions - 35 Margaret Street (3rd Reading) 122 - 125

10.3. Ride Sharing By-Law (1st and 2nd Reading) 126 - 182

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11.1. Request to Purchase In-Person Ticket for FCM Annual Conference (Councillor Killen) 183 - 183

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12. Business Matters - Municipal Officers

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13. Committee Reports

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13.2. Growth Committee: Updates to Land for Public Purpose Policy 427 - 438

13.3. Growth Committee: Municipal ENCORE Program - 2022 Sidewalk Cafe Rebate Initiative 439 - 443

14. Consideration of Issues Separated from Consent Agenda

15. General Correspondence

15.1. Big Brothers Big Sisters: Bowl for Kids' Sake - Ticket Purchase Request (Recommendation: Refer to City Clerk to purchase tickets for interested Council members) 444 - 446

15.2. YMCA Red Triangle Awards - Ticket Purchase Request (Refer to City Clerk to purchase tickets for interested Council members) 447 - 449

15.3. K. Carpenter: Sidewalk Dedication between new Wentworth and Princess Street (Recommendation: Receive for Information) 450 - 450

15.4. Falun Dafa Association of Canada: Falun Dafa Day Celebration - Request for Recognition 451 - 453

16. Supplemental Agenda

17. Committee of the Whole

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17.2. Assignment of Lease re: Sagrati's - City Market 455 - 455

18. Adjournment

City of Saint John
Common Council Meeting
Tuesday, April 19, 2022

Committee of the Whole

1. Call to Order

Si vous avez besoin des services en français pour une réunion de Conseil communal, veuillez contacter le bureau du greffier communal au 658-2862.

Each of the following items, either in whole or in part, is able to be discussed in private pursuant to the provisions of subsection 68(1) of the Local Governance Act and Council / Committee will make a decision(s) in that respect in Open Session:

4:30 p.m., 2nd Floor Boardroom, City Hall

1.1 Approval of Minutes 68(1)
1.2 Financial Matter 68(1)(c)
1.3 Financial Matter 68(1)(c)
1.4 Financial Matter 68(1)(c)
1.5 Financial Matter 68(1)(c)
1.6 Personnel Matter 68(1)(f)

Ville de Saint John
Réunion du Conseil municipal
Mardi 19 avril 2022
18 h
Salle du Conseil municipal, Hôtel de Ville, 2e étage

Comité plénier

1. Ouverture de la séance

Si vous souhaitez obtenir des services en français pour une séance du Conseil municipal, veuillez communiquer avec le bureau du greffier municipal, au 658-2862.

Chacun des points suivants, en totalité ou en partie, peut faire l'objet d'une discussion en privé en vertu des dispositions du paragraphe 68(1) de la *Loi sur la gouvernance locale*. Le Conseil/Comité prendra une ou des décisions à cet égard au cours de la séance publique :

16 h 30 – Séance à huis clos du Comité plénier – Salle de conférence du 2e étage

1.1 Approbation du procès-verbal – paragraphe 68(1)
1.2 Question liée aux finances – alinéa 68(1)c)
1.3 Question liée aux finances – alinéa 68(1)c)
1.4 Question liée aux finances – alinéa 68(1)c)
1.5 Question liée aux finances – alinéa 68(1)c)
1.6 Question liée au personnel – alinéa 68(1)j)

Réunion ordinaire

1. Ouverture de la séance

1.1 Reconnaissance des territoires

1.2 Hymne national

2. Approbation du procès-verbal

2.1 Procès-verbal de la réunion du 4 avril 2022

3. Adoption de l'ordre du jour

4. Divulgations des conflits d'intérêts

5. Résolutions en bloc

5.1. Accord sur l'utilisation et la confidentialité des données sur l'évaluation foncière (Recommandation contenue dans le rapport)

5.2 Contrat de gestion d'entreprise Apple (Recommandation contenue dans le rapport)

5.3 Services d'ingénierie : Market Place West – Phase III de la revitalisation (Recommandation contenue dans le rapport)

5.4 2022 – Acquisition régionale de services d'orthophotographie numérique (Recommandation contenue dans le rapport)

5.5 Contrat n° 2022-10 Resurfaçage de l'asphalte en 2022 (Recommandation contenue dans le rapport)

5.6 Désignation d'un agent d'application des arrêtés municipaux – Jason Romhild (Recommandation contenue dans le rapport)

5.7 Désignation d'agents chargés de l'application des arrêtés municipaux (Recommandation contenue dans le rapport)

5.8 Modification du contrat de location 398 conclu avec l'Administration portuaire de Saint John (Recommandation contenue dans le rapport)

5.9 Services d'ingénierie : Amélioration du drainage des barrages et de la voie d'accès au lac Menzies (Recommandation contenue dans le rapport)

5.10 Demande de propositions 2022-621001P – Espace public à Market Slip & Harbour Passage Extension – Luminaires au niveau des piétons (Recommandation contenue dans le rapport)

5.11 Demande de propositions 2022-562002P : Espace public à Market Slip & Harbour Passage Extension – Pavés en béton (Recommandation contenue dans le rapport)

5.12 Projet de modification de l'arrêté sur les secteurs de conservation du patrimoine (Recommandation contenue dans le rapport)

5.13 Projets de construction de routes pour 2022 (Recommandation : Dépôt pour information)

6. Commentaires des membres

7. Proclamation

7.1 Semaine nationale de promotion de la vaccination – du 23 au 30 avril 2022

7.2 Mois de sensibilisation au SGB et à la PDIC – mai 2022

8. Délégations/Présentations

9. Séance publique

9.1 Obstruction et fermeture d'une partie de Chipman Hill (première et deuxième lecture)

10. Examen d'arrêtés municipaux

10.1 Arrêté modifiant l'arrêté sur l'approvisionnement en eau et les égouts (première et deuxième lecture)

10.2 Arrêté modifiant l'Arrêté de zonage et conditions de l'article 59 – 35 Margaret Street (troisième lecture)

10.3 Arrêté sur le covoiturage (première et deuxième lecture)

11. Soumissions des membres du Conseil

11.1. Demande d'achat de billets pour la conférence annuelle de la FCM (conseillère Killen)

12. Questions de gestion interne – agents municipaux

12.1. Stratégie d'adoption de technologie à faible émission de carbone pour le transport en commun et la flotte de la Ville de Saint John

12.2 Modification de la servitude et permis pour un terrain de hockey-balle en plein air – Station Street

12.3 Projet concernant la Coupe Memorial 2022

13. Rapports des comités

13.1. Comité des finances : Services d'audit interne

13.2. Comité sur la croissance : Mises à jour de la politique relative aux terrains d'utilité publique

13.3. Comité sur la croissance : Programme municipal ENCORE – Initiative de rabais sur les permis pour terrasses de cafés 2022

14. Examen de questions non visées par les résolutions en bloc

15. Correspondance générale

15.1. Grands frères/Grandes sœurs : Quille-O-Thon pour les enfants – Demande d'achat de billets (Recommandation : Demander au greffier municipal d'acheter des billets pour les membres du Conseil intéressés à participer à cet événement)

15.2. YMCA Red Triangle Awards – Demande d'achat de billets (Demander au greffier municipal d'acheter des billets pour les membres du Conseil intéressés à participer à cet événement)

15.3. K. Carpenter : Dédication du trottoir entre la nouvelle rue Wentworth et la rue Princesse
(Recommandation : Recevoir pour information)

15.4. Association Falun Dafa du Canada : Célébration de la Journée du Falun Dafa – Demande

de reconnaissance

16. Ordre du jour supplémentaire

17. Comité plénier

17.1 Lettre de mission modifiée – PwC

17.2 Cession de bail re : Sagrati's – City Market

18. Levée de la séance

The City of Saint John

MINUTES – REGULAR MEETING
COMMON COUNCIL OF THE CITY OF SAINT JOHN
APRIL 4, 2022, AT 6:00 PM
2ND FLOOR COMMON COUNCIL CHAMBER, CITY HALL

Present:

Mayor Donna Noade Reardon
Deputy Mayor John MacKenzie
Councillor-at-Large Gary Sullivan
Councillor-at-Large Brent Harris
Councillor Ward 1 Joanna Killen
Councillor Ward 1 Greg Norton
Councillor Ward 2 Barry Ogden
Councillor Ward 3 David Hickey
Councillor Ward 3 Gerry Lowe
Councillor Ward 4 Greg Stewart
Councillor Ward 4 Paula Radwan

Also Present:

City Manager J. Collin
General Counsel M. Tompkins
Commissioner, Human Resources S. Hossack
Fire Chief & Chief Emergency Management Services K. Clifford
Commissioner, Utilities & Infrastructure Services B. McGovern
Commissioner, Growth & Community Services J. Hamilton
Director Finance J. Forgie
Commissioner, Public Works and Transportation Services M. Hugenholtz
Director Legislative Services / City Clerk J. Taylor
Deputy Clerk P. Anglin
Administrative Officer R. Evans

1. Call to Order

1.1 Land Acknowledgement

Councillor Hickey read aloud the Land Acknowledgement and called for a moment of reflection.

"The City of Saint John/Menaquesk is situated is the traditional territory of the Wolastoqiyik/Maliseet.The Wolastoqiyik/Maliseet along with their Indigenous Neighbours, the Mi'Kmaq/Mi'kmaw and Passamaquoddy/Peskotomuhkati signed Peace and Friendship Treaties with the British Crown in the 1700s that protected their rights to lands and resources."

1.2 National Anthem

The Saint John Symphony Youth Orchestra performed O Canada by video.

2. Approval of Minutes

2.1 Minutes of March 21, 2022

Moved by Councillor Norton, seconded by Councillor Hickey:
RESOLVED that the meeting minutes of March 21st be approved.

MOTION CARRIED.

3. Approval of Agenda

Moved by Councillor Norton, seconded by Councillor Hickey:
RESOLVED that the agenda for April 4th, 2022, be adopted with the addition of the following items:

- 17.1 City Market Lease Renewal with Sisters Italian Foods Ltd. Operating under the registered business name Sisters Italian Foods
- 17.2 City Market Lease with Black Douglas Holding Ltd., Operating under the registered business name Sagratis
- 17.3 Appointments to Committees

4. Disclosures of Conflict of Interest

Councillor Killen declared a conflict with items 17.1 and 17.2.

5. Consent Agenda

5.1 That as recommended by the City Manager in the submitted report *M&C 2022-097: Proposed Local Government Services Easement - 406-418 Chesley Drive*, Common Council assent to the submitted subdivision plan entitled "Tentative Subdivision Plan – Ocean Steel and Construction Ltd. Subdivision", located at 406-418 Chesley Drive (PIDs 00372888, 55144273, 00369611, 00369629, 55118434, 00369652, 55217525, 55217533, 55144265, 55144216, and 55144232), with respect to the vesting of the proposed Local Government Services Easement.

5.2 That as recommended by the City Manager in the submitted report M*&C 2022-104: Initiate Stop-Up and Closure for Portion of Chipman Hill and Convey to 703732 N.B. Ltd*., Common Council adopt the following resolution:

1. The Public Hearing to consider the passing of an amendment to the Street Closing By-law to Close an 11 square metre portion of a public street known as Chipman Hill, as shown on a Plan of Survey titled, "Showing portion of Chipman Hill, City of Saint John, Saint John County, New Brunswick" (see attached), be set for Tuesday, April 19, 2022 at 6:30 p.m. in the Council Chamber;

2. Common Council authorize the publishing of a notice of its intention to consider the passing of such By-law, identified above;

3. In the event that Common Council gives Third Reading to the By-Law Amendment as stated above, that the City sell the property to 703732 N.B. Ltd. for a purchase price of $2,500.00, and that the purchaser be responsible for:

    a. any plan of survey required to initiate the process for the stop-up and closure for a portion of Chipman Hill; and
    b. any fees or administrative processes to effect the conveyance of the property; and

4. That the Mayor and City Clerk be authorized to execute the documents necessary to effect the transaction.

5.3 That as recommended by the City Manager in the submitted report *M&C 2022-108: Proposed Public Hearing Date - 60 Exmouth Street and 990 Fairville Boulevard*, Common Council schedule the public hearings for the Section 59 amendment application submitted by Kaleidoscope Social Impact for 60 Exmouth Street (PIDs 00016097, 00013045, 00013037, 55146716 and 00016204); and the Zoning By-law amendment application submitted by Comeau MacKenzie Architecture for 990 Fairville Boulevard (PID 403378) for Monday, June 13, 2022 at 6:30 p.m. at the Council Chamber, City Hall 2nd floor, 15 Market Square, Saint John, NB.

5.4 That as recommended by the City Manager in the submitted report M&C 2022-098: Street Naming - Pisunawtik Road, Common Council amend the list of Official Street Names and approve the following change:

1. Add the name "chemin Pisunawtik Road".

5.5 That as recommended by the City Manager in the submitted report *M&C 2021-093: Engineering Services Peters Street - Water, Sanitary, Storm and Street Reconstruction*, Common Council accept the proposal from EXP Services Inc., for engineering design and construction management services for the Peters Street – Water, Sanitary, Storm and Street Reconstruction project in the amount of $148,508.70 including HST and that the Mayor and City Clerk be authorized to execute the appropriate documentation in that regard.

5.6 That as recommended by the City Manager in the submitted report *M&C 2022-099: Highway Usage Permit (HUP) - Province of New Brunswick Design and Construction of New One Mile Sewage Lift Station on Rothesay Avenue*, the City of Saint John enter

into Highway Usage Permit (HUP) No. 202011R1030300101 with the Province of New Brunswick (Minister of Transportation and Infrastructure) and that the Mayor and City Clerk be authorized to execute the necessary documents.

5.7 That as recommended by the City Manager in the submitted report *M&C 2022-100: 2022 Engineering Inspection Services*, Common Council authorize staff to establish supply agreements with the seven (7) consulting firms identified in the report, at the hourly rates provided in this report totaling $600,000 plus HST for the provision of engineering inspection services for the 2022 Capital Construction projects being designed by City staff.

5.8 That as recommended by the City Manager in the submitted report *M&C 2022-105: Woodlawn Park Lift Station - Pump Supply*, Common Council approve the proposal from Xylem Canada LP to supply two sewage lift pumps for the Woodlawn Park Lift Station project in the amount of $124,591.16 including HST be accepted, and that Supply Chain Management be authorized to purchase the pumps.

5.9 That as recommended by the City Manager in the submitted report *M&C 2022-106: Managed Health Care Services Inc. Financial Policy Amendment*, Common Council authorize the Mayor and City Clerk to execute the amended contract with Managed Health Care Services Inc (MHCSI) as attached to report 2022-106.

5.10 That as recommended by the City Manager in the submitted report *M&C 2022-111: Pump Purchase - Thorne Avenue Pumping Station (Sanitary Lift Station No. 4)*, Common Council accept Quotation #22-12-0080 from Xylem Canada LP (Xylem) for one (1) Flygt Model CT 3240 Submersible Pump in the amount of $206,789.27 including HST and that the Mayor and City Clerk be authorized to execute the appropriate documentation in that regard.

5.11 That as recommended by the City Manager in the submitted report *M&C 2022-113: Tender for Asphaltic Concrete Mixes*, Common Council approve the seasonal tender for the supply of asphaltic concrete mixes be awarded as follows:

- Pre-Construction Season (April 18th, to May 2nd, 2022) - Galbraith Construction Ltd.
- Construction Season (May 3rd to November 5th, 2022) – NRB Construction Company Ltd.
- Post Construction Season (November 6th, 2022, to plant close) – Galbraith Construction Ltd.

5.12 That as recommended by the City Manager in the submitted report *M&C 2022-114: Funding Opportunity - RDC Offer*:

- The Mayor and City Clerk be authorized to sign a letter of offer with the Regional Development Corporation in the form as presented to Committee of the Whole in M&C 2022-102 at its March 28, 2022 meeting; and further,
- That all information relating to the letter of offer remain confidential in accordance with the Terms and Conditions of the said letter of offer.

Moved by Deputy Mayor MacKenzie, seconded by Councillor Harris:
RESOLVED that the recommendation set out in each consent agenda item respectively be adopted.

MOTION CARRIED UNANIMOUSLY.

6. Members Comments

7. Proclamation

7.1 National Public Safety Telecommunications Week - April 10 to April 16, 2022

The Mayor declared the week of April 10 - April 16th, 2022 National Public Safety Telecommunications Week in the City of Saint John.

8. Delegations/Presentations

9. Public Hearings- 6:30pm

9.1 Proposed Zoning By-Law Amendment with Planning Advisory Committee report recommending Rezoning – 35 Margaret Street (1st and 2nd Reading)

Commissioner Hamilton introduced the proposed amendment to the Zoning By-Law which would permit an existing 4-unit multiple dwelling. Staff and PAC are aligned and recommend approval of the proposal. Staff also recommend that Common Council withhold third reading and adoption of the proposed rezoning until the applicant submits a building permit application illustrating the necessary improvements to meet the 2015 National Building Code to the satisfaction of the City's Building Inspector.

Mayor Noade Reardon called the Public Hearing to Order.

The Mayor called for members of the public to speak against the proposed amendment with no one presenting.

The Mayor called for members of the public to speak in favour of the proposed amendment with no one presenting.

Mayor Noade Reardon closed the Public Hearing.

Moved by Councillor Lowe, seconded by Councillor Radwan:
RESOLVED that the by-law entitled, "A Law to Amend the Zoning By-Law of The City of Saint John" rezoning a parcel of land having an area of approximately 488 m2, located at 35 Margaret Street, also identified as portions of PID Number 00316950, from Two-Unit Residential (R2) to Low-Rise Residential (RL), be read a first time.

MOTION CARRIED.

Read a first time by title, the by-law entitled, "A Law to Amend the Zoning By-Law of The City of Saint John."

Moved by Deputy Mayor MacKenzie, seconded by Councillor Stewart:
RESOLVED that the by-law entitled, "A Law to Amend the Zoning By-Law of The City of Saint John" rezoning a parcel of land having an area of approximately 488 m2, located at

35 Margaret Street, also identified as portions of PID Number 00316950, from Two-Unit Residential (R2) to Low-Rise Residential (RL), be read a second time.

MOTION CARRIED.

Read a second time by title, the by-law entitled, “A Law to Amend the Zoning By-Law of The City of Saint John.”

Moved by Councillor Sullivan, seconded by Councillor Hickey:
RESOLVED that Common Council withhold third reading and adoption of the proposed rezoning until the applicant submits a building permit application illustrating the necessary improvements to meet the 2015 National Building Code to the satisfaction of the City’s Building Inspector.

MOTION CARRIED.

10. Consideration of By-Laws

10.1 By-Law respecting the Use of Sidewalks within The City of Saint John (3rd Reading)

Moved by Councillor Hickey, seconded by Councillor Sullivan:
RESOLVED that the by-law entitled, “By-Law Number L.G.-13 A By-Law respecting the Use of Sidewalks within The City of Saint John and amendments thereto”, which clarifies insurance requirements, parking fees and submission requirements for Sidewalk Cafes, permission requirements for Sidewalk Vendor sites and removes outdated and superseded sections of the Bylaw related to sidewalk openings, be read.

MOTION CARRIED.

The by-law entitled “By-Law Number L.G.-13 A By-Law respecting the Use of Sidewalks within The City of Saint John and amendments thereto,” was read in summary.

Moved by Councillor Sullivan, seconded by Councillor Radwan:
RESOLVED that the by-law entitled, “By-Law Number L.G.-13 A By-Law respecting the Use of Sidewalks within The City of Saint John and amendments thereto”, which clarifies insurance requirements, parking fees and submission requirements for Sidewalk Cafes, permission requirements for Sidewalk Vendor sites and removes outdated and superseded sections of the Bylaw related to sidewalk openings, be read a third time, enacted, and the Corporate Common Seal affixed thereto.

MOTION CARRIED.

Read a third time by title, the by-law entitled “By-Law Number L.G.-13 A By-Law respecting the Use of Sidewalks within The City of Saint John and amendments thereto.”

11. Submissions by Council Members

12. Business Matters-Municipal Officers

13. Committee Reports

13.1 Finance Committee: Canada Emergency Wage Subsidy

Chair of the Finance Committee Councillor Sullivan advised that the Canada Emergency Wage Subsidy provided to the Canada Games Aquatic Centre has been deemed ineligible by the CRA and must be repaid, thereby creating a liability. The liability has been recorded on the City's 2022 audited statement and the Canada Games Aquatic Commission audited statement.

Moved by Councillor Sullivan, seconded by Councillor Radwan:
RESOLVED that the submitted report Canada Emergency Wage Subsidy be received for information.

MOTION CARRIED.

13.2 Finance Committee: Capital Reserve Funds for Modernized Solid Waste Collection Model

Moved by Councillor Sullivan, seconded by Councillor:
RESOLVED that as recommended by the Finance Committee in the submitted report *M&C 2022-109: Capital Reserve Funds for Modernized Solid Waste Collection Model*, Common Council endorse the allocation of up to $400,000 from capital reserve funds to cover an unfunded portion of the expenses required to implement the new Solid Waste Collection Model.

MOTION CARRIED with Councillor Radwan voting nay stating she is in support of recycling, composting and staff safety measures, but feels the City is spending a lot of money without enough consultation.

13.2.1 Solid Waste Modernization - Procurement and Delivery of Bins and Totes (Recommendation in Report)

Moved by Councillor Killen, seconded by Councillor Ogden:
RESOLVED that as recommended by the City Manager in the submitted report *M&C 2020-110: Solid Waste Modernization – Procurement and Delivery of Bins and Totes,* Common Council:

1) award the purchase of recycling totes and lids at a cost of $519,866 + HST to Nova Products Division; and
2) award the purchase of refuse (garbage) carts (including the fee for logistics and distribution services) at a cost of $1,387,926 + HST to Toter, LLC.

MOTION CARRIED with Councillor Radwan voting nay stating that there was some public consultation and a pilot program however the survey results were not great, and staff should further investigate any hiccups before rolling out the program.

14. Consideration of Issues Separate from Consent Agenda

15. General Correspondence

15.1 Saint John Community Arts Board: 2022 Saint John Community Arts Funding Program (Spring) (Recommendation: Receive for Information)

Moved by Councillor Killen, seconded by Councillor Harris:
RESOLVED that the submitted letter 2022 Saint John Community Arts Funding Program (Spring) be received for information.

MOTION CARRIED.

15.2 Kaleidoscope Social Impact: Request for Letter of Support for the House of Merritt-Supportive Housing Project (Recommendation: Refer to City Manager for drafting of letter and authorize Mayor to sign on behalf of Council)

Moved by Councillor Hickey, seconded by Deputy Mayor MacKenzie:
RESOLVED that the submitted letter from Kaleidoscope Social Impact be referred to the City Manager for drafting of the letter and the Mayor be authorized to sign on behalf of Council.

MOTION CARRIED.

15.3 GBS/CIDP Foundation of Canada - Request to proclaim May 2022 as GBS and CIDP Awareness Month (Recommendation: Refer to City Manager)

Moved by Deputy Mayor MacKenzie, seconded by Councillor Stewart:
RESOLVED that the letter from GBS/CIDP Foundation of Canada be referred to the City Manager.

MOTION CARRIED.

16. Supplemental Agenda

17. Committee of the Whole

Having declared a conflict-of-interest Councillor Killen withdrew from the meeting for the discussion of items 17.1 and 17.2.

17.1 City Market Lease Renewal with Sisters Italian Foods Ltd. Operating under the registered business name Sisters Italian Foods

Moved by Councillor Sullivan, seconded by Deputy Mayor MacKenzie:
RESOLVED that as recommended by the Committee of the Whole having met on April 4th, 2022 the City renew the Lease for Staff F and the ancillary spaces in the City Market with
Sisters Italian Foods Ltd., operating under the registered business name Sisters Italian Foods, under the terms and conditions as set out in the Lease submitted with M&C 2022-101; and

FURTHER BE IT RESOLVED that the Mayor and City Clerk be authorized to execute any documents ancillary thereto.

MOTION CARRIED with Councillor Radwan voting nay stating she supports the City Market and the business owners but feels a City Market lease review needs to be conducted before proceeding.

17.2 City Market Lease with Black Douglas Holding Ltd., Operating under the registered business name Sagratis

Moved by Deputy Mayor MacKenzie, seconded by Councillor Hickey:
RESOLVED that as recommended by the Committee of the Whole having met on April 4th, 2022 the City enter into a Lease for Stall 15 and ancillary spaces in the City Market with Black Douglas Holding Ltd., Dba Sagratis, under the terms and conditions as set out in the Lease submitted with the report M&C 2022-107; and;

FURTHER BE IT RESOLVED that the Mayor and City Clerk be authorized to execute the said Lease, and any documents ancillary thereto.

MOTION CARRIED with Councillor Radwan voting nay.

Councillor Killen re-entered the meeting.

17.3 Appointments to Committees

Moved by Councillor Radwan, seconded by Councillor Hickey:
RESOLVED that as recommended by the Committee of the Whole having met on April 4th, 2022 Common Council approve the following appointments to Committees:

City Market Strategic Plan Steering Committee: to appoint Becky Knox for a term from April 4, 2022 to November 21, 2022, or until the strategic plan is completed;

City of Saint John Shared Risk Pension Plan Board of Trustees: to reappoint Andrew Green for a 4-year term from April 4, 2022 to April 4, 2026;

Civic Commemoration Committee: to appoint Councillors Ogden and Hickey from April 4, 2022 to the end of their current terms of Council and to appoint Heidi MacDonald, Krista Downey, Jocelyn Stevens, Carl Killen, and Misty Schofield each for 3-year terms from April 4, 2022 to April 4, 2025;

Lord Beaverbrook Rink: to reappoint Heather McBriarty for a 3-year term from April 29, 2022 to April 29, 2025;

Planning Advisory Committee: to appoint Phil Comeau for a 3-year term from April 4, 2022 to January 1, 2025;

Saint John Community Arts Board: to appoint Wenmei Li for a 3-year term from April 4, 2022 to April 4, 2025;

Saint John Energy: to appoint Colleen d'Entremont and Stephanie Bell both for 3-year terms from July 8, 2022 to July 8, 2025, and September 4, 2022 to September 4, 2025, respectively;

Saint John Substandard Properties Appeal Committee: to appoint David Brown for a 3-year term from April 4, 2022 to April 4, 2025;

Trade and Convention Centre Commission: to appoint Richard Peters for a 3-year term from April 4, 2022 to April 4, 2025.

MOTION CARRIED.

18. Adjournment

Moved by Councillor Sullivan, seconded by Councillor Killen:
RESOLVED that the meeting of Common Council held on April 4th, 2022 be adjourned.

MOTION CARRIED.

The Mayor declared the meeting adjourned at 6:58 p.m.

COUNCIL REPORT

M&C No.	2022-117
Report Date	April 12, 2022
Meeting Date	April 19, 2022
Service Area	Utilities and Infrastructure Services

Her Worship Mayor Donna Noade Reardon and Members of Council

SUBJECT: **Property Assessment Data Use and Confidentiality Agreement**

AUTHORIZATION

Primary Author	Commissioner/Dept. Head	City Manager
Yves Leger	***J. Brent McGovern /Michael Baker***	***John Collin***

RECOMMENDATION

RESOLVED that the City enter into a Data Use and Confidentiality Agreement with Service New Brunswick for the supply of certain confidential information, in the form attached to M&C No. 2022-117; and that the Mayor and City Clerk be authorized to execute said Agreement and any documents ancillary thereto.

EXECUTIVE SUMMARY

The purpose of this report is to seek Council's approval to enter into a Data Use and Confidentiality agreement with Service New Brunswick for the right to receive and use confidential information including property assessment data as described therein in the form attached to M&C No. 2022-117; and that the Mayor and City Clerk be authorized to execute the necessary contract documents.

PREVIOUS RESOLUTION

N/A

REPORT

The City has been receiving monthly updates of property assessment information, in electronic format, from Service New Brunswick for over 20 years. In addition to assessed values of properties, assessment information is the primary source for property owners' mailing addresses, among other information used by the City on a regular basis. This information is crucial to many City operations and is necessary for the planning and delivery of municipal services.

The previous data use and confidentiality agreement term ended October 24th, 2021. While SNB has continued to provide monthly updates to the City until March

2022, they have now requested that the agreement be renewed to extend the term until October 24th, 2024.

STRATEGIC ALIGNMENT

Given up-to-date property assessment information is crucial for many City operations and the delivery of municipal services, signing this agreement aligns with Council's "Grow" priority.

SERVICE AND FINANCIAL OUTCOMES

There is no cost associated with signing this agreement.

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

The City's Legal Department has reviewed the agreement, which appears to be a standard form used by Service New Brunswick with all municipalities and have no concerns.

ATTACHMENT

Data Use and Confidentiality Agreement

DATA USE AND CONFIDENTIALITY AGREEMENT

THIS AGREEMENT made in duplicate as of the 25 of October 2021 until 24 of October 2024.

BETWEEN:

Service New Brunswick,
a Crown corporation with head offices at 850 Lincoln Road, Fredericton, NB E3B 4Z7
(hereafter called “SNB”)

OF THE FIRST PART

-and-

City of Saint John,
15 Market Square, Saint John, New Brunswick, E2L 4L1
A body corporate located in the County of Saint John and incorporated under the laws and regulations of the Province of New Brunswick.
(hereafter called “Saint John”)

OF THE SECOND PART

WHEREAS pursuant to section 23(4.1) of the Assessment Act, the Director may release information contained in the real property assessment list to any person or body that the Director considers appropriate if the person to whom the information or documentation is released agrees in writing that the information or documentation will be restricted to use in the assessment functions of that government.

AND WHEREAS the parties are entering into this agreement whereby Saint John will be supplied with certain Confidential Information belonging to SNB for the purpose of performing city business functions and delivering municipal services.

AND WHEREAS for the purpose of preventing the unauthorized disclosure of Confidential Information as defined below, the parties agree to enter into a confidential relationship with respect to the disclosure of this Confidential Information.

NOW THEREFORE in consideration of the mutual covenants and agreements contained in this agreement and other good and valuable consideration, the parties agree as follows:

1. **(a) Definition of Confidential Information**. For purpose of this Agreement, "Confidential Information" includes but is not limited to any documents, instructions, guidelines, data, material, advice or any other information whether received orally, in printed form, recorded electronically, or otherwise and whether or not labeled as proprietary or confidential that is disclosed to Saint John.

   (b) Exclusion From Confidential Information. Saint John's obligations under this Agreement do not extend to information that is:

   (i) publicly known at the time of disclosure or subsequently becomes publicly known through no fault of Saint John;
   (ii) discovered or created by Saint John before disclosure by SNB;
   (iii) learned by Saint John through legitimate means other than from SNB or SNB's representatives; or
   (iv) is disclosed by Saint John with SNB's prior written approval.

2. The parties acknowledge that each is bound by the provisions of privacy legislation in force from time to time with respect to the provision of this Agreement, including but not limited to the *Right to Information and Protection of Privacy Act c. R-10.6*; or any other applicable privacy legislation in effect from time to time.

3. The Confidential Information is provided on an "as is" basis and SNB makes no representations or warranties whatsoever with respect to the Information, whether expressed or implied, in relation to the Information and expressly disclaims any implied warranty of merchantability or fitness for a particular purpose.

Obligations of Saint John.

4. **(a) Strict Confidence.** Saint John shall hold and maintain the Confidential Information in strictest confidence. Saint John shall carefully restrict access to Confidential Information to parties with a "need-to-know", or in response to a subpoena, warrant, order, or demand of a Canadian court of law.

   (b) Use. Saint John shall use the Confidential Information only for the purpose of performing city business functions and delivering municipal services.

   Saint John shall not, without prior written approval of SNB, use for Saint John's own benefit, publish, copy or otherwise disclose to others, or permit the use by others for their benefit or to the detriment of SNB, any Confidential Information.

   (c) Notification. Saint John shall notify SNB's Property Assessment Services Director of Gama and System Support immediately upon discovery of any unauthorized use or disclosure of Confidential Information or any other breach of this Agreement. Saint John will cooperate with SNB in every reasonable way to help SNB regain possession of the Confidential Information and prevent its further unauthorized use or disclosure, and to cooperate with SNB's investigation of the circumstances surrounding its loss.
   `

5. **Time Periods**. The parties agree that this Agreement shall begin on the date of signing. The nondisclosure provisions of the Agreement shall survive the termination of this Agreement.

6. **Relationships**. Nothing contained in the Agreement shall be deemed to constitute the Service Provider an employee of SNB for any purpose.

7. **No Assignment.** Neither this Agreement nor any rights or obligations hereunder, in whole or in part, may be assigned by a party without the prior written consent of the other party.

8. **Severability**. If a court finds any provision of this Agreement invalid or unenforceable, the remainder of this Agreement shall be interpreted so as best to affect the intent of the parties.

9. **Entire Agreement**. This Agreement expresses the complete understanding of the parties with respect to the subject matter and supersedes all prior proposals, agreements, representations and understandings. This Agreement may not be amended except in a writing signed by both parties.

10. **Applicable Law.** This Agreement will be governed by the laws of the Province of New Brunswick and the federal laws of Canada. The parties submit to the exclusive jurisdiction of the courts of the Province of New Brunswick.

11. **Waiver.** A waiver must be made in writing and signed by the party claimed to have waived or consented. Such waiver and consent will not be considered a waiver of any other right. Any waiver does not prevent the party who has waived from insisting on compliance at a later date.

12. **Execution.** This Agreement may be executed in any number of counterparts, which together shall constitute one instrument. Delivery of an executed counterpart of a signature page of this Agreement by facsimile or electronically shall be effective as delivery of a manually executed counterpart of this Agreement.

Service New Brunswick

_____

Name: Stephen Walsh
Title: PAS System Support Manager

City of Saint John

_____

Name: Donna Reardon
Title: Mayor

_____

Name: Jonathan Taylor
Title: Common Clerk

Schedule “A” – Data to be Provided by SNB to Saint John

Data Being Shared

FOR THE REGIONS OF SAINT JOHN AND KINGS COUNTY;

REGION, PAN, OWNER_1, OWNER_2, ADDRESS_1, ADDRESS_2, POSTAL_COD,P_LOCATION, P_DESCRIPTION, P_TYPE_COD, SEQ_NUMBER, PID, PID2, PID_OVERFL, MAP_SHEET, TAX_AUTH, NBHD_CODE, TAX_CLASS, CURR_ASSMT, TAX_CREDIT, SUB_UNIT, VOL_NUM_1, PAG_NUM_1, DOC_NUM_1, TRAN_DAT_1, TRAN_TYP_1, VOL_NUM_2, DOC_NUM_2, TRAN_DAT_2, TRAN_TYP_2, VOL_NUM_3, PAG_NUM_3, DOC_NUM_3, TRAN_DAT_3, TRAN_TYP_3, YEAR_FIRST, STATUS, L_TYP_HOLD, SPEC_ID_CO, NUM_UNITS, FLIP_CODE, COUNTY, CUR_NT_LEV, CUR_BIA_TX, BLDG_CLASS, BLDG_AGE, P_TYP_CD2, P_TYP_CD3, P_TYP_CD4, P_TYP_CD5, P_TYP_CD6, P_TYP_CD7, P_TYP_CD8, P_TYP_CD9, P_TYP_CD10, STOREY_HT, RES_ASSMT, NRES_ASSMT, CRED_PORT

SAINT JOHN

COMMON COUNCIL REPORT

M&C No.	2022 - 121
Report Date	April 13, 2022
Meeting Date	April 19, 2022
Service Area	Strategic Services

Her Worship Mayor Donna Noade Reardon and Members of Common Council

SUBJECT: Apple Business Manager Agreement

OPEN OR CLOSED SESSION

This matter is to be discussed in open session of Common Council.

AUTHORIZATION

Primary Author	Commissioner/Dept. Head	City Manager
Sarah Ranson	***Stephanie Rackley-Roach*** ***Kevin Fudge***	***John Collin***

RECOMMENDATION

The City Manager recommends that Common Council authorize Information Technology staff to enter into an online Apple Business Manager Agreement with Apple Inc. to automate and manage content of Apple-branded devices; and that Common Council accept the Terms and Conditions of said Agreement in the form attached to M&C 2022-121.

EXECUTIVE SUMMARY

Apple Business Manager (ABM) will streamline the management of mobile devices, such as iPhones and iPads. ABM is a free application that the Information Technology staff can use with existing security tools. To begin using the tool, Mayor and Council must agree to the terms and conditions.

PREVIOUS RESOLUTION

N/A

REPORT

The Information Technology (IT) service area is responsible for managing the administration, security, and lifecycle of mobile devices. A mobile device management (MDM) tool is already in place to manage the security of mobile devices. For example, IT staff can remotely lock lost phones without contacting the wireless service provider. It is also possible to ensure all mobile device users have installed updates to the operating system.

The Apple Business Manager (ABM) is a centralized administration portal that integrates with the current MDM and will enhance IT's ability to manage mobile device accounts (i.e., the set-up, and decommissioning of mobile devices). ABM makes it easy to automate device deployment, purchase apps, and distribute content, as well as create Managed Apple IDs (user accounts) for users. City users assigned mobile devices will benefit from the streamlined process for setting up mobile devices and IT's increased ability to help users with technical issues and managing mobile devices.

STRATEGIC ALIGNMENT

The use of Apple Business Manager (ABM) will benefit the City by enhancing the IT service area's ability to efficiently manage mobile devices. AMB will reduce the time currently spent on device set up, and costs incurred when assets cannot be redeployed because of account settings.

SERVICE AND FINANCIAL OUTCOMES

There is no cost to use Apple Business Manager.

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

The General Counsel's Office has reviewed the terms and conditions of the Apple Business Manager agreement.

ATTACHMENTS

Apple Business Manager Agreement – Terms and Conditions

VEUILLEZ LIRE ATTENTIVEMENT CES CONDITIONS GÉNÉRALES CONCERNANT APPLE BUSINESS MANAGER AVANT DE COMMENCER À UTILISER LE SERVICE. CES CONDITIONS GÉNÉRALES TIENNENT LIEU D'ENTENTE LÉGALE ENTRE L'INSTITUTION ET APPLE. EN CLIQUANT SUR LE BOUTON « ACCEPTER », L'INSTITUTION, PAR L'INTERMÉDIAIRE DE SON REPRÉSENTANT AUTORISÉ, ACCEPTE D'ÊTRE LIÉE PAR CETTE ENTENTE ET EN DEVIENT PARTIE. SI L'INSTITUTION N'ACCEPTE PAS OU NE PEUT PAS ACCEPTER LES TERMES DE CETTE ENTENTE, VOUS DEVEZ CLIQUER SUR LE BOUTON « ANNULER ». SI L'INSTITUTION N'ACCEPTE PAS LES MODALITÉS DE CETTE ENTENTE, ALORS SA PARTICIPATION N'EST PAS ACCEPTÉE.

Entente relative au service Apple Business Manager

Intention

La présente Entente vous permet d'utiliser le service Apple Business Manager, par lequel Vous pouvez automatiser l'inscription d'appareils de marque Apple aux fins de la gestion des appareils mobiles (GAM) de Votre Institution, afin d'acheter et de gérer du contenu pour lesdits appareils, de créer des Identifiants Apple gérés pour vos utilisateurs et d'accéder à des outils pouvant faciliter des services connexes.

Remarque : Vous devez être muni d'une solution de GAM (p. ex. une solution créée par un développeur tiers), mise en œuvre dans Votre Institution, pour pouvoir profiter des avantages de ce service. Une solution de GAM vous permet de configurer, de déployer et de gérer des appareils de marque Apple. Pour en savoir plus, consultez la page https://www.apple.com/ca/fr/business/apps/.

1. Définitions

En apparaissant avec une majuscule initiale dans cette Entente :

« **Administrateurs** » désigne les employés ou entrepreneurs (ou encore les fournisseurs de services) de Votre Institution qui ont été inscrits au Service aux fins de la gestion des comptes, y compris l'administration des serveurs, le téléchargement des paramètres d'approvisionnement de GAM, l'ajout d'appareils à Votre compte, l'achat de contenu et la prestation de services connexes.

« **Entente** » désigne cette Entente relative au service Apple Business Manager.

« **Apple** » désigne ce qui suit, sauf indication contraire dans les présentes : (a) **Apple Inc**., située à One Apple Park Way, Cupertino, Californie 95014, États-Unis, pour les Institutions en Amérique du Nord, centrale et du Sud (à l'exclusion du Canada), ainsi que les territoires et possessions des États-Unis; et possessions françaises et britanniques en Amérique du Nord, en Amérique du Sud et dans les Caraïbes; (b) **Apple Canada Inc.,** située au 120, boul. Bremner, bureau 1600, Toronto (ON) M5J 0A8, Canada, pour les Institutions au Canada ou ses territoires et possessions; (c) **iTunes K.K.**, située à Roppongi Hills, 6-10-1 Roppongi, Minato-ku, Tokyo 106-6140, Japon, pour les Institutions au Japon; (d) **Apple Pty Limited**, située au 20 Martin Place, Sydney NSW 2000, Australie, pour les Institutions en Australie et en Nouvelle-Zélande, y compris les possessions insulaires, les territoires et les entités affiliées; et (e) **Apple Distribution International Ltd.**, située à Hollyhill Industrial Estate, Hollyhill, Cork, République d'Irlande, pour les Institutions de tous les autres pays ou territoires non spécifiés ci-dessus dans lesquels le Service est offert.

« **Services Apple** » désigne l'App Store, Apple Books, l'Apple Store en ligne, AppleCare, iCloud et d'autres services Apple mis à la disposition de vos Utilisateurs autorisés en vertu de cette Entente.

« **Logiciels Apple** » désigne les logiciels exécutés par les systèmes d'exploitation iOS, iPadOS, macOS, tvOS et watchOS, ainsi que toute nouvelle version de ces produits.

« **Appareils autorisés** » désigne les produits de marque Apple détenus ou contrôlés par Vous, dont l'utilisation a été confiée uniquement aux Utilisateurs autorisés et aux Utilisateurs détenant un laissez-passer, et qui sont admissibles à une utilisation par l'entremise du Service. Pour éviter tout doute, les appareils appartenant à des particuliers (p. ex. les modèles de type « Apportez votre appareil ») ne sont pas admissibles à la gestion supervisée d'appareils (par exemple, à la configuration avec des paramètres d'inscription de GAM) faisant partie du Service, sauf si Apple en donne l'accord par écrit préalablement. De plus, tous les appareils ne sont pas admissibles au Service.

« **Utilisateurs autorisés** » désigne les employés ou entrepreneurs (ou les Fournisseurs de services) de Votre Institution, et, si Vous représentez un hôpital, le terme « Utilisateurs autorisés » comprend également les médecins accrédités, qu'ils soient médecins traitants ou cliniciens). Pour plus de clarté, Vous pouvez demander, et Apple peut approuver, à sa seule discrétion, que des utilisateurs similaires soient inclus en tant qu'« Utilisateurs autorisés »; cependant, aucune autre partie ne sera incluse dans cette définition sans le consentement écrit préalable d'Apple.

« **Contenu** » désigne tout matériel ou toute information obtenus sous licence ou en tant que partie du Service dans le cadre des conditions du Programme de licences multipostes d'Apple (p. ex. les apps de l'App Store).

« **Entrepreneurs** » désigne des particuliers qui exécutent des tâches ou fournissent des services au nom d'une entité sur une base tarifaire globale et qui bénéficient d'un accès interne aux systèmes de TI privés de l'entité (p. ex. les RPV) ou à ses installations sécurisées (pé ex. les badges d'accès aux bureaux).

« **Paramètres d'inscription d'appareil** » désigne les paramètres d'un produit de marque Apple qui peuvent être configurés et gérés dans le cadre du Service, y compris, mais sans s'y limiter, le débit initial d'inscription de l'appareil, ainsi que des paramètres de surveillance de l'appareil, des configurations obligatoires ou le verrouillage d'un profil de GAM.

« **Documentation** » désigne les fiches techniques ou autres documents liés à la prestation du Service fournis par Apple.

« **Contrat de licence d'utilisateur final** » ou « **CLUF** » désigne les conditions générales de l'accord de licence des logiciels pour les Logiciels Apple.

« **Identifiant(s) Apple géré(s)** » désigne un compte d'utilisateur (y compris, mais sans s'y limiter, le stockage, le calendrier, les notes et les contacts) que Vous créez et déployez par l'entremise du Service.

« **Serveur(s) de GAM** » désigne les ordinateurs détenus ou contrôlés par Vous (ou par un Fournisseur de services agissant en Votre nom) qui ont été désignés pour communiquer avec le Service.

« **Entité(s) autorisée(s)** » désigne : (a) si Vous êtes un fabricant de véhicules, vos concessionnaires autorisés et vos partenaires de réparation certifiés; (b) si Vous êtes un holding hôtelier, les propriétés opérant sous Votre nom, Votre marque de commerce ou toute autre marque (ou sous un nom, une marque de commerce ou toute autre marque que Vous détenez ou contrôlez); ou (c) si Vous déployez une app sur des Appareils autorisés en mode App restreinte (par exemple, Vous êtes un fournisseur de points de vente qui déploie des systèmes de paiement

sur iPad), vos clients qui utilisent l'app en question en mode App restreinte sur des Appareils autorisés. De plus, toute app de ce type doit être conçue et distribuée en conformité avec les conditions du contrat de licence du Programme pour développeurs Apple (par exemple, la distribution d'une app conçue sur mesure). Pour plus de clarté, Vous pouvez demander et Apple peut autoriser des utilisateurs semblables à ceux mentionnés dans les sous-paragraphes (a) et (b); cependant, aucune autre partie ne sera incluse dans cette définition sans le consentement écrit préalable d'Apple.

Utilisateurs détenant un laissez-passer désigne les employés et les entrepreneurs de Votre Entité autorisée.

« **Données personnelles** » désigne les données pouvant être raisonnablement utilisées pour identifier une personne qui sont détenues par l'Institution concernée dans le cadre de cette Entente.

« **Mode App restreinte** » désigne le mode d'opération des appareils Apple configurés et supervisés par l'entremise du Service qui (a) lancent automatiquement une seule application et en forcent l'utilisation dès leur activation, et ne permettent pas l'accès à d'autres fonctionnalités du système d'exploitation; ou qui (b) ne peuvent pas être personnalisés par l'utilisateur final (par exemple, lorsque les paramètres de l'appareil interdisent à l'app Mail d'être configurée avec des identifiants personnels ou interdisent l'acquisition de contenus de l'App Store avec des identifiants Apple personnels, etc.).

« **Service** » désigne le service Apple Business Manager (et toutes ses composantes et fonctionnalités) qui assure l'inscription automatisée à la gestion d'appareils mobiles, l'acquisition et la gestion de Contenu, la création, l'utilisation et la gestion d'Identifiants Apple gérés et du stockage iCloud associé à un Identifiant Apple géré, l'utilisation de Comptes administrateur, et d'autres services connexes, comme cela est décrit dans la présente Entente, y compris le portail web et tout autre service ou outil fourni ci-dessous.

« **Fournisseur de services** » désigne un tiers qui fournit un service en Votre nom, conformément aux modalités de la présente Entente.

« **Jeton serveur** » désigne la combinaison de Votre clé publique, de Votre identifiant Apple et d'un jeton fourni par Apple qui permet d'enregistrer Votre serveur ou vos serveurs de GAM auprès du Service.

« **Sous-traitant** » désigne un tiers qui effectue certaines tâches pour le compte d'Apple, telles que le traitement ou le stockage de données et la fourniture d'un service client, dans le cadre de la prestation du service par Apple.

« **Vous** », « **Votre** » **et** « **Institution** » désignent l'organisme qui conclut la présente Entente. Pour éviter tout doute, l'Institution est responsable du respect de la présente entente par ses employés, ses Entrepreneurs et ses Fournisseurs de services autorisés à exercer des droits en son nom, en vertu de la présente entente.

Remarque : Si Vous êtes un fournisseur de services tiers, Vous devez faire signer cette Entente par l'Institution pour laquelle Vous travaillez et vous inscrire en tant qu'Administrateur, puisque l'entité qui détient les Appareils autorisés et qui les distribue à ses Utilisateurs autorisés doit s'inscrire au Service.

2. Exigences du Service

2.1 Utilisation du Service

Afin d'utiliser le Service, l'Institution reconnaît et accepte que :

(a) elle est autorisée à utiliser le Service aux fins et de la manière expressément autorisées par cette Entente, et en conformité avec la Documentation ainsi que les lois et réglementations applicables;

(b) elle n'est pas autorisée à utiliser le Service, en tout ou en partie, aux fins d'activités illicites, inconvenantes, inappropriées ou non autorisées;

(c) elle est autorisée à utiliser le Service pour gérer des Appareils autorisés à usage exclusif par des Utilisateurs autorisés et non pas pour un déploiement général au profit de tiers (sauf si cela est expressément permis aux présentes); elle est également responsable de toute utilisation d'Appareils autorisés par des Utilisateurs autorisés, y compris, mais sans s'y limiter, l'obtention du consentement de ces derniers et la fourniture des renseignements nécessaires concernant les fonctionnalités gérées de tels appareils;

(d) elle est responsable de toute utilisation du Service par son Entité autorisée (et par tous les Utilisateurs détenant un laissez-passer de cette Entité autorisée) et de toute action entreprise par cette dernière, qui sera considérée comme étant entreprise par l'Institution; l'Institution (en plus de son Entité autorisée) sera donc considérée comme responsable de ces actions auprès d'Apple.

(e) elle doit obtenir tous les droits et consentements nécessaires auprès des Utilisateurs autorisés et des Utilisateurs détenant un laissez-passer pour déployer les Appareils autorisés comme autorisé par les présentes;

(f) elle a le droit d'acheter et de gérer le Contenu comme il est requis par le Service et doit respecter toutes les conditions applicables à l'utilisation d'un tel Contenu;

(g) elle doit obtenir tous les droits et consentements nécessaires des Utilisateurs autorisés si nécessaire pour créer des Identifiants Apple gérés et pour permettre à Apple de fournir le Service pour les Identifiants Apple gérés (y compris l'utilisation et la conservation des Données personnelles);

(h) elle peut ajouter des Administrateurs au Service, mais seulement si les individus en question sont ses employés ou des Entrepreneurs à son service, ou s'ils sont des Fournisseurs de services agissant à son nom (et elle peut les ajouter seulement aux fins de gestion de comptes); et

(i) elle peut utiliser le Service uniquement aux fins de ses activités internes et de ses technologies de l'information (et de celles de son Entité autorisée), et n'est pas autorisée à fournir à des tiers (autres que l'Entité autorisée mentionnée au sous-paragraphe (c) de la définition d'« Entité autorisée ») des appareils ni des services qui intègrent des renseignements fournis par le Service ou qui en tirent profit, ou qui utilisent le Service de quelque façon que ce soit, à moins d'avoir préalablement reçu le consentement par écrit d'Apple.

2.2 Exclusion d'autres usages

L'Institution accepte de ne pas utiliser le service d'aucune façon non autorisée, y compris, mais sans s'y limiter, en y accédant sans autorisation, en surchargeant le réseau ou en y téléversant du code malveillant. Toute tentative dans ce sens est une violation des droits d'Apple et de ses concédants de licence. L'Institution ne peut pas vendre, louer, céder, assigner, héberger ou distribuer le Service ou ses composantes à des tiers, ni concéder une licence, ni permettre son utilisation à travers une exploitation en temps partagé ou par l'intermédiaire d'une société de services informatiques, sauf dans les cas permis par la présente Entente. L'Institution accepte de ne pas utiliser le Service pour poursuivre, harceler, tromper, agresser, menacer une personne, ni pour nuire à autrui, ni pour prétendre être quelqu'un d'autre que l'entité inscrite, et Apple se réserve le droit de refuser ou de bloquer tout compte pouvant être considéré comme l'imitation ou la représentation erronée d'une autre identité ou l'appropriation frauduleuse du nom ou de l'identité d'une autre personne. L'Institution ne doit pas entraver le fonctionnement du Service ni d'aucune mesure de sécurité, signature numérique ou gestion des droits numériques, ni de ses mécanismes de vérification ou d'authentification mis en œuvre dans ou par le Service ou par les Logiciels Apple ou par toute autre technologie ou tout autre logiciel Apple connexe, et elle ne doit pas permettre

non plus à d'autres d'en faire autant. Si l'Institution est une entité couverte, un associé commercial, un représentant d'une entité couverte ou d'un associé commercial (au sens où ces termes sont définis dans 45 C.F.R. § 160.103), ou autrement un fournisseur ou une entité de soins de santé, l'Institution accepte qu'elle ne doit pas utiliser aucun composant, aucune fonction ou autre installation du Service pour créer, recevoir, maintenir ou transmettre toute « Information de santé protégée » (tel que ce terme est défini dans 45 C.F.R. § 160.103) ou des données de santé équivalentes en vertu de la loi applicable, ou utiliser le Service d'une manière faisant d'Apple un partenaire commercial de l'Institution ou de tout tiers ou autrement soumettre directement Apple aux lois applicables en matière de protection des renseignements personnels sur la santé. Tous les droits non expressément concédés dans le cadre de cette Entente sont réservés, et aucune autre licence ou immunité, ni aucun autre droit explicite ou implicite n'est garanti par Apple, ni par implication ni par préclusion ni d'aucune autre façon.

2.3 Utilisation de Jeton serveur

L'Institution accepte d'utiliser le Jeton serveur uniquement aux fins d'inscription de son serveur de GAM dans le Service et de téléversement des paramètres d'inscription de l'appareil qui seront distribués parmi les Appareils autorisés au moment de leur activation initiale par les Utilisateurs autorisés et les Utilisateurs détenant un laissez-passer. L'Institution accepte de ne pas fournir ni transférer son Jeton serveur à aucune entité et de ne pas le partager avec aucune entité, à l'exception de son Fournisseur de services. L'Institution accepte de prendre les mesures appropriées pour garantir la sécurité et la confidentialité du Jeton serveur et de le révoquer s'il a été compromis ou si elle a des raisons de croire qu'il a été compromis. Apple se réserve le droit de révoquer ou de désactiver les Jetons serveur à tout moment et à sa seule discrétion. De plus, l'Institution comprend et accepte que le renouvellement du Jeton serveur influencera sa capacité à utiliser le Service jusqu'à ce qu'un nouveau Jeton serveur soit ajouté au serveur de GAM.

2.4 Conditions générales du Contrat de licence d'utilisateur final (« CLUF »)

Dans le cadre du Service, l'Institution peut choisir de laisser ses Utilisateurs autorisés accepter les conditions générales des Logiciels Apple en dehors du processus normal d'activation initiale des appareils. L'Institution peut utiliser cette fonctionnalité du Service aussi longtemps qu'elle se conforme aux exigences suivantes :

(a) le représentant autorisé de l'Institution doit accepter les Contrats de licence d'utilisateur final pour les Logiciels Apple sur le portail web du Service avant de déployer des Appareils autorisés exploitant ledit logiciel auprès des Utilisateurs autorisés et des Utilisateurs détenant un laissez-passer;

(b) si les CLUF des Logiciels Apple ont changé, l'Institution accepte de faire en sorte que son représentant autorisé retourne au portail web du Service et accepte rapidement, sous avis d'Apple, tous les CLUF modifiés, dans le but de continuer à utiliser le Service. L'Institution reconnaît qu'elle ne sera pas capable d'utiliser le Service, y compris pour connecter de nouveaux Appareils autorisés à son serveur de GAM, jusqu'à ce que ces CLUF aient été acceptés;

(c) l'Institution est responsable de veiller à ce que de tels CLUF soient fournis à ses Utilisateurs autorisés et à ses Utilisateurs détenant un laissez-passer, et que chacun d'entre eux connaisse et applique les conditions générales du CLUF lié aux Logiciels Apple; et

(d) l'Institution accepte d'être responsable de l'obtention de tous les consentements requis pour l'utilisation des Logiciels Apple par les Utilisateurs autorisés et les Utilisateurs détenant un laissez-passer.

2.5 Transfert d'appareils

L'Institution ne revendra aucun Appareil autorisé muni de paramètres d'inscription d'appareil activés et accepte de supprimer du Service tout Appareil destiné à la revente ou à la cession, de quelque façon que ce soit.

2.6 Achat de Contenu

L'acquisition de Contenu est automatiquement désactivée dans le Service et Votre utilisation est soumise aux exigences de cette Entente et aux conditions régissant l'utilisation des apps et des livres dans le cadre du Service (« Conditions du Programme de licences multipostes »). Vous pouvez choisir d'autoriser vos Administrateurs à accéder au Contenu à travers le Service en leur accordant un pouvoir d'achat et en leur permettant d'accéder au Contenu. Sous réserve des conditions du Programme de licences multipostes et des limitations imposées par cette Entente, le Service vous permet d'affecter du Contenu aux Appareils autorisés (en utilisant la fonctionnalité d'attribution aux appareils) ou aux Utilisateurs autorisés et aux Utilisateurs détenant un laissez-passer (en utilisant la fonctionnalité d'attribution aux utilisateurs et des identifiants Apple). Vous pouvez attribuer (ou révoquer et attribuer de nouveau) des apps à des Utilisateurs autorisés et à des Appareils autorisés dans n'importe quel pays où ces apps sont offertes sur l'App Store ou ailleurs, sous réserve de changement quant à leur disponibilité en tout temps. Pour ce qui est des livres, Vous comprenez et acceptez qu'une fois Vous avez attribué un livre à un Utilisateur autorisé ou à un Utilisateur détenant un laissez-passer, ce livre ne peut plus être transféré et Vous ne serez plus en mesure de l'attribuer de nouveau ni d'en révoquer l'attribution. Vous êtes seul responsable de ces achats et de leur conformité aux conditions applicables. Si Vous (ou vos Administrateurs) achetez du Contenu ou y accédez dans le cadre du Service, Vous acceptez d'en avoir l'autorité ainsi que les conditions applicables au nom de vos Utilisateurs autorisés et de vos Utilisateurs détenant un laissez-passer. Vous comprenez et acceptez que le Contenu pourrait ne pas être offert dans tous les pays ou toutes les régions. Vous acceptez de ne pas exporter le Contenu à l'extérieur du pays où Vous résidez, ni prétendre que Vous avez le droit ou les moyens de le faire. Vous acceptez de ne contourner aucune loi d'aucun pays ni les restrictions établies par les fournisseurs du Contenu.

2.7 Comptes administrateur

Vous pouvez créer des comptes pour vos Administrateurs afin qu'ils puissent gérer le Service, sous réserve des limites sur le nombre de Comptes administrateur imposées par Apple. Ces Comptes administrateur seront une combinaison d'un nom d'utilisateur et d'un mot de passe uniques détenus par Vous. Lorsque Vous créez des Comptes administrateur, toutes les caractéristiques et les fonctionnalités du Service que Vous choisissez de rendre disponibles sont activées pour ces comptes, et Vous êtes responsable de correctement activer ces Comptes administrateur et de toute activité en rapport avec ces comptes (par exemple, l'autorisation de faire des achats de Contenu). Vous reconnaissez et acceptez que ces Comptes administrateur ne peuvent être utilisés que pour gérer le Service ou y accéder à des fins de gestion de compte. Si Vous supprimez un Compte administrateur, ni Vous ni l'Administrateur n'aurez plus accès au compte, et Vous reconnaissez et acceptez que cette action peut être irréversible.

2.8 Identifiants Apple gérés

Vous pouvez créer des Identifiants Apple gérés que les Utilisateurs autorisés pourront utiliser et auxquels ils pourront accéder dans le cadre du Service conformément à la présente Entente et à la Documentation. Vous êtes responsable de décider quelles caractéristiques et fonctionnalités du Service activer pour vos Utilisateurs autorisés et pour la création, l'utilisation et la gestion des identifiants Apple gérés.

Pour créer un Identifiant Apple géré pour un Utilisateur autorisé, les informations suivantes, qui peuvent inclure des Données personnelles, sont requises : nom, rôle proposé, mot de passe, adresse courriel (aux fins de communication) et numéro de téléphone. Afin d'assurer la sécurité des comptes de vos Utilisateurs autorisés et de préserver Votre capacité à réinitialiser facilement leurs mots de passe en ligne, Vous devriez garder confidentiels ces renseignements. Vous acceptez de déployer des Identifiants Apple gérés seulement aux fins de vos activités internes et de vos technologies de l'information, et uniquement auprès de vos Utilisateurs autorisés. Vous acceptez de ne pas divulguer, vendre, revendre, louer, prêter ou garantir l'accès aux

Identifitans Apple gérés de quelque manière que ce soit à des individus autres que vos Utilisateurs autorisés. Vous pouvez désactiver, suspendre ou supprimer des Identifiants Apple gérés (par exemple, si un Utilisateur autorisé quitte l'Institution) dans le Service. Apple se réserve le droit de limiter le nombre d'Identifiants Apple gérés qui peuvent être créés pour vos Utilisateurs autorisés et le nombre d'Appareils autorisés associés à un compte.

Si Vous permettez à vos Administrateurs, à vos gestionnaires et à vos employés de se connecter à d'autres Services Apple, Vous acceptez que ces Services puissent stocker des données sur les comptes associés aux identifiants Apple gérés de vos Utilisateurs autorisés, et autorisez également Apple à recueillir, à stocker et à traiter ces données en lien avec l'utilisation que Vous ou vos Utilisateurs autorisés faites de tels Services. Vous êtes responsable de vous assurer que Vous et vos Utilisateurs autorisés respectez toutes les lois applicables pour chacun des Identifiants Apple gérés, selon le Service Apple auquel Vous permettez à vos Utilisateurs autorisés d'accéder. Si vos Administrateurs, vos gestionnaires ou vos employés accédent à certains Services Apple, Apple pourrait communiquer avec vos Utilisateurs autorisés à propos de leur utilisation de tels Services.

2.9 Entités autorisées et Utilisateurs détenant un laissez-passer

Sous réserve des conditions de cette Entente, les Entités autorisées et les Utilisateurs détenant un laissez-passer peuvent accéder au Service par l'entremise de Votre Compte, sauf en ce qui concerne l'utilisation et le déploiement d'Identifiants Apple gérés (tant que cela n'est pas approuvé séparément, en avance et par écrit par Apple). Vous êtes responsable de la conformité de vos Entités autorisées et de vos Utilisateurs détenant un laissez-passer aux conditions de cette Entente, et êtes directement responsable auprès d'Apple de toute violation aux présentes par eux. Si Vous (ou Votre Fournisseur de services agissant en Votre nom) ajoutez des appareils de marque Apple au service, et ces appareils appartiennent à une Entité autorisée, Vous déclarez et garantissez à Apple que l'Entité autorisée vous a autorisé à ajouter ces appareils, que Vous contrôlez ces appareils et que Vous détenez l'autorité d'accepter des CLUF au nom de l'Entité autorisée (et de ses Utilisateurs détenant un laissez-passer, le cas échéant). Apple se réserve le droit d'imposer des limites aux caractéristiques et aux fonctionnalités du Service auxquelles l'Institution peut autoriser l'accès à son Entité autorisée (ou à ses Utilisateurs détenant un laissez-passer), et de vous demander de retirer toute Entitée autorisée ou tout Utilisateur détenant un laissez-passer de Votre compte, en tout temps et à son entière discrétion.

2.10 Mises à jour et absence d'assistance ou de maintenance

Apple peut prolonger, améliorer, suspendre, interrompre ou modifier de toute autre façon le Service (ou une de ses parties) fourni ci-dessous à tout moment, avec ou sans préavis, et ce, sans que la responsabilité d'Apple soit engagée ni envers Vous ni envers un tiers, du fait de l'exercice par Apple de ces droits. Apple n'est pas obligée de fournir des mises à jour du Service à l'Institution. Si Apple rend une mise à jour disponible, elle sera sujette aux conditions de cette Entente, sauf si la mise à jour en question est accompagnée d'une entente à part, auquel cas les conditions de cette nouvelle entente prévaudront. Si une mise à jour venait à être rendue disponible, elle pourrait contenir des caractéristiques, des services ou des fonctionnalités qui diffèrent de ceux et celles qui font partie du Service. Apple n'est pas obligée de fournir de la maintenance ni de soutien technique ou autre pour le Service.

2.11 Fournisseurs de services tiers

Vous êtes autorisé à utiliser un Fournisseur de services tiers uniquement si celui-ci accède au service ou l'utilise en Votre nom et conformément à ces conditions, et s'il est lié par une entente exécutoire écrite entre Vous et lui comportant des conditions au moins aussi restrictives et protectrices que celles d'Apple dans le présent document. Toute action entreprise par un tel Fournisseur de services en rapport au Service ou découlant de cette Entente doit être considérée comme étant entreprise par Vous, et Vous (en plus du Fournisseur de services) êtes responsable devant Apple de ces actions (entreprises ou non). Dans l'éventualité où des actions ou des omissions du Fournisseur de services constituent une violation de cette Entente ou causent des dommages, Apple se réserve le droit de vous exiger de cesser d'utiliser le Fournisseur de services en question.

3. Obligations de l'Institution

L'Institution déclare et certifie que :

(a) son mandataire ou représentant autorisé a le droit et l'autorité de conclure cette Entente en son nom, et de lier légalement l'Institution aux modalités et obligations de celle-ci;

(b) toute information fournie par l'Institution à Apple (ou à ses Utilisateurs autorisés ou à ses Utilisateurs détenant un laissez-passer) en lien avec cette Entente (y compris les Logiciels Apple) doit être actuelle, vraie, précise, vérifiable et complète; et, pour ce qui est de l'information que l'Institution fournit à Apple, l'Institution doit rapidement notifier Apple de toute modification apportée à une telle information;

(c) elle est responsable de surveiller les actions et l'utilisation du Service faite par ses représentants autorisés, ses Administrateurs, ses Fournisseurs de services, ses Utilisateurs autorisés, ses Utilisateurs détenant un laissez-passer et ses Entités autorisées, ainsi que de leur conformité aux modalités de cette Entente;

(d) elle est seule responsable de l'ensemble des coûts, des dépenses, des pertes et des responsabilités encourus, ainsi que des activités entreprises par elle, ses représentants, ses Administrateurs, ses Fournisseurs de services, ses Utilisateurs autorisés, ses Utilisateurs détenant un laissez-passer, ses Entités autorisées et ses Appareils autorisés en rapport avec le Service;

(e) elle est seule responsable de la conformité à toutes les lois sur la vie privée et la protection des données (par exemple, le règlement [UE] 2016/679 du Parlement européen et du Conseil du 27 avril 2016 relatif à la protection des personnes physiques à l'égard du traitement des données à caractère personnel et à la libre circulation de ces données, et abrogeant la directive 95/46/CE [« Règlement général sur la protection des données »]) concernant l'utilisation du Service et l'utilisation ou la collecte de données, y compris les Données personnelles, et les informations par le biais du Service;

(f) elle est responsable de son activité liée aux Données personnelles (par exemple, la sauvegarde, la surveillance et la limitation de l'accès aux Données personnelles, la prévention et le traitement des activités inappropriées, etc.); et

(g) elle se soumettra aux conditions et obligations dictées par cette Entente.

4. Changements aux exigences ou aux conditions du Service

Apple peut modifier le Service ou les conditions de cette Entente en tout temps. Dans le but de continuer à utiliser le Service, l'Institution, à travers son représentant autorisé, doit accepter et se conformer aux nouvelles exigences ou conditions de cette Entente. Si Vous n'acceptez pas ces nouvelles exigences ou conditions, Apple peut suspendre Votre utilisation du Service, en tout ou en partie, ou y mettre fin. Vous convenez que Votre acceptation des conditions d'une telle nouvelle Entente peut être déclarée par voie électronique, y compris, mais sans s'y limiter, en cochant une case ou en cliquant sur un bouton « J'accepte » ou tout bouton menant à une action similaire.

5. Indemnisation

Dans la mesure permise par la loi en vigueur, Vous acceptez d'indemniser, de dégager de toute responsabilité et, à la demande d'Apple, de défendre Apple, ses administrateurs, dirigeants, employés, entreprises affiliées, contractuels indépendants et représentants autorisés (chacun étant une « partie indemnisée Apple ») en cas de réclamations, de pertes, de dettes, de dommages, de dépenses et de coûts de tout type, y compris, mais sans s'y limiter, les honoraires d'avocat et les frais judiciaires (collectivement, les « pertes ») encourus par une partie indemnisée Apple et découlant de ou liés à : (a) Votre violation de toute certification, obligation, déclaration ou garantie ou de tout engagement fait dans la présente Entente; (b) Votre utilisation (y compris celle de Votre Fournisseur de services, Administrateur, Utilisateur autorisé, Utilisateur détenant un laissez-passer ou Entité autorisée) du Service; (c) toute réclamation, y compris, mais sans s'y limiter, toute réclamation de l'utilisateur final, concernant Votre utilisation, déploiement ou gestion des Appareils autorisés, des paramètres d'inscription des appareils ou des serveurs de GAM; (d) toute réclamation, y compris, mais sans s'y limiter, toute réclamation de l'utilisateur final, concernant la fourniture, la gestion ou l'utilisation des Appareils autorisés, des Comptes administrateur, des Identifiants Apple gérés ou du Contenu sous licence ou acheté par le biais du Service, ou toute autre utilisation du Service; et/ou (e) toute réclamation concernant Votre utilisation ou gestion des Données personnelles. Vous ne pouvez en aucun cas conclure un règlement ou une entente semblable avec un tiers qui aurait des conséquences sur les droits d'Apple ou de toute Partie indemnisée Apple, ou qui lierait Apple ou toute Partie indemnisée Apple, sans le consentement écrit préalable d'Apple.

6. Durée et résiliation

La présente Entente entrera en vigueur à la date à laquelle Vous accepterez celle-ci à travers le Service et se poursuivra pour une période initiale de un (1) an après la date d'activation par Apple de Votre compte auprès du Service. Par la suite, sous réserve de Votre conformité aux conditions de cette Entente, la durée sera renouvelée pour des périodes successives de un (1) an, à moins de résiliation de l'Entente comme il est disposé par celle-ci. N'importe laquelle des parties de cette Entente peut résilier celle-ci à sa convenance, pour toute raison ou sans raison, moyennant un préavis écrit de trente (30) jours.

Si Vous ne vous conformez pas, ou si Apple soupçonne que Vous ne vous êtes pas conformé, à l'une des dispositions de la présente Entente, Apple, à sa seule discrétion et sans préavis, peut : (a) résilier la présente Entente et/ou fermer Votre compte; et/ou (b) suspendre ou empêcher l'accès au Service (ou à une partie de celui-ci). Apple se réserve le droit de modifier, de suspendre ou d'interrompre le Service (ou toute partie ou fonctionnalité de celui-ci) à tout moment et sans Vous donner de préavis, et ce, sans que la responsabilité d'Apple soit engagée ni envers Vous ni envers un tiers, du fait de l'exercice par Apple de ces droits. Apple peut également résilier cette Entente, ou Vous suspendre les droits d'utilisation du Service, si Vous refusez d'accepter toute condition d'une nouvelle Entente comme cela est décrit dans l'article 4. Vous reconnaissez et acceptez qu'il est possible que Vous ne soyez pas en mesure d'accéder au Service après l'expiration ou la résiliation de cette Entente, et qu'Apple se réserve le droit de suspendre l'accès ou de supprimer les données ou les renseignements que Vous, vos Administrateurs, vos Utilisateurs autorisés, vos Entités autorisées ou vos Utilisateurs détenant un laissez-passer auriez stockés dans le cadre de l'utilisation du Service. Vous devriez lire la Documentation avant toute utilisation d'une partie du Service, et effectuer les sauvegardes de vos données et de vos renseignements pertinentes. Apple ne peut être tenue responsable envers Vous ni envers un tiers des dommages découlant d'une telle résiliation ou suspension de Votre compte ou de Votre accès au Service, du fait de l'exercice par Apple de ces droits. Les dispositions suivantes survivront à la résiliation de la présente Entente : l'article 1, la deuxième phrase de l'article 2.9, l'article 2.10, l'article 3, la deuxième phrase de l'article 2.11, l'article 3, l'article 5, le deuxième paragraphe de l'article 6 et les articles 7, 8, 9 et 10.

7. EXONÉRATION DES GARANTIES

VOUS RECONNAISSEZ ET CONVENEZ EXPRESSÉMENT, DANS LA MESURE AUTORISÉE PAR LES LOIS EN VIGUEUR, QUE VOTRE UTILISATION, OU INCOMPÉTENCE QUANT À L'UTILISATION, DU SERVICE, DES OUTILS OU DES FONCTIONNALITÉS LIÉS AU SERVICE, EST À VOS PROPRES RISQUES, ET QUE LA TOTALITÉ DU RISQUE RELATIF À LA QUALITÉ, AUX PERFORMANCES, À LA PRÉCISION ET AU MANIEMENT ADÉQUAT REPOSE SUR VOUS.

DANS LA MESURE AUTORISÉE PAR LA LOI, LE SERVICE EST FOURNI « TEL QUEL » ET « COMME DISPONIBLE », AVEC TOUS SES DÉFAUTS ET SANS AUCUNE GARANTIE. PAR LA PRÉSENTE, APPLE, SES DIRECTEURS, SES ADMINISTRATEURS, SES EMPLOYÉS, SES SOCIÉTÉS AFFILIÉES, SES REPRÉSENTANTS AUTORISÉS, SES MANDATAIRES, SES ENTREPRENEURS, SES REVENDEURS OU SES CONCÉDANTS DE LICENCE (APPELÉES COLLECTIVEMENT « APPLE » AUX FINS DES **ARTICLES 7** ET **8**) DÉCLINENT TOUTES LES GARANTIES ET CONDITIONS CONCERNANT LE SERVICE, QU'ELLES SOIENT EXPRESSES, IMPLICITES OU PRÉVUES PAR LA LOI, Y COMPRIS, MAIS SANS S'Y LIMITER, LES GARANTIES ET CONDITIONS IMPLICITES DE QUALITÉ MARCHANDE, DE QUALITÉ SATISFAISANTE, D'ADAPTATION À UN USAGE PARTICULIER, D'EXACTITUDE, DE JOUISSANCE PAISIBLE, DE DROIT DE PROPRIÉTÉ ET DE NON-VIOLATION DES DROITS DES TIERS.

APPLE NE PEUT GARANTIR, CERTIFIER OU DÉCLARER QU'IL N'Y AURA PAS D'INTERFÉRENCE QUANT À VOTRE UTILISATION DU SERVICE OU DE PERTE DE JOUISSANCE LIÉE À CELLE-CI, QUE LES FONCTIONNALITÉS COMPRISES OU LES SERVICES OFFERTS PAR LE SERVICE RÉPONDRONT À VOS ATTENTES OU SERONT SÉCURITAIRES, QUE LE FONCTIONNEMENT DU SERVICE SERA ININTERROMPU OU EXEMPT D'ERREURS, QUE LES DÉFAUTS OU ERREURS SERONT CORRIGÉS, QUE LE SERVICE DEMEURERA ACCESSIBLE OU QU'IL SERA COMPATIBLE OU INTEROPÉRABLE AVEC TOUT LOGICIEL OU TOUTE APPLICATION DE TIERS OU AVEC D'AUTRES PRODUITS OU SERVICES APPLE, QU'AUCUNE DONNÉE OU INFORMATION STOCKÉE DANS LE SERVICE OU TRANSMISE PAR SON ENTREMISE NE SERA PERDUE, CORROMPUE, ENDOMMAGÉE, ATTAQUÉE, PIRATÉE, VICTIME D'INTERFÉRENCE OU SOUMISE À TOUTE AUTRE ATTEINTE À LA SÉCURITÉ. VOUS ACCEPTEZ QUE DE TEMPS À AUTRE, APPLE PUISSE CESSER D'ASSURER LE SERVICE DURANT DES PÉRIODES INDÉTERMINÉES, OU MODIFIER, SUSPENDRE, ARRÊTER OU ANNULER LE SERVICE À TOUT MOMENT, SANS VOUS DONNER D'AVIS PRÉALABLE.

VOUS RECONNAISSEZ ÉGALEMENT QUE LE SERVICE N'A PAS ÉTÉ CONÇU ET NE CONVIENT PAS À UNE UTILISATION DANS DES SITUATIONS OU DES ENVIRONNEMENTS OÙ UNE DÉFAILLANCE, DES RETARDS, DES ERREURS OU DES INEXACTITUDES DANS LE CONTENU, LES DONNÉES OU LES RENSEIGNEMENTS FOURNIS À TRAVERS LE SERVICE POURRAIENT ENTRAÎNER LA MORT, DES BLESSURES OU DES DOMMAGES PHYSIQUES OU ENVIRONNEMENTAUX GRAVES, Y COMPRIS, MAIS SANS S'Y LIMITER, POUR L'EXPLOITATION D'INSTALLATIONS NUCLÉAIRES, LES SYSTÈMES DE NAVIGATION OU DE COMMUNICATIONS AÉRIENNES, LE CONTRÔLE DE LA CIRCULATION AÉRIENNE, AINSI QUE LES SYSTÈMES DE MAINTIEN DES FONCTIONS VITALES ET D'ARMEMENT.

AUCUNE INFORMATION NI AUCUN CONSEIL COMMUNIQUÉ VERBALEMENT OU PAR ÉCRIT PAR APPLE OU PAR UN REPRÉSENTANT APPLE AUTORISÉ NE POURRONT CONSTITUER UNE GARANTIE NON EXPRESSÉMENT DÉCLARÉE DANS LE CADRE DE CETTE ENTENTE. SI LE SERVICE S'AVÈRE DÉFECTUEUX, VOUS ASSUMEREZ LE COÛT TOTAL DES SERVICES, DES RÉPARATIONS OU DES CORRECTIONS NÉCESSAIRES.

8. LIMITATION DE RESPONSABILITÉ

DANS LA MESURE OÙ LA LOI NE L'INTERDIT PAS, EN AUCUN CAS APPLE NE PEUT ÊTRE TENUE RESPONSABLE DE TOUT DOMMAGE CORPOREL OU DE TOUT DOMMAGE INDIRECT, ACCESSOIRE, PARTICULIER OU CONSÉCUTIF QUE CE SOIT, Y COMPRIS, MAIS SANS S'Y LIMITER, LES DOMMAGES DUS AUX PERTES DE BÉNÉFICES, AUX PERTES OU À LA CORRUPTION DE DONNÉES OU DE TOUTE AUTRE INFORMATION, AU DÉFAUT DE TRANSMETTRE OU DE RECEVOIR DES DONNÉES, AUX PERTES RELIÉES À L'INTERRUPTION DES ACTIVITÉS OU TOUT AUTRE DOMMAGE COMMERCIAL DÉCOULANT DE CETTE ENTENTE OU DE VOTRE UTILISATION OU DE VOTRE INCAPACITÉ À UTILISER LE SERVICE, MÊME SI APPLE A ÉTÉ AVISÉE OU EST AU COURANT DE LA POSSIBILITÉ DE TELS DOMMAGES, ET SANS ÉGARD À LA THÉORIE DE LA RESPONSABILITÉ (CONTRAT, DÉLIT OU AUTREMENT). EN AUCUN CAS LA RESPONSABILITÉ TOTALE D'APPLE POUR TOUT DOMMAGE (EN DEHORS DE CE QUE LA LOI APPLICABLE POURRAIT EXIGER DANS UNE AFFAIRE IMPLIQUANT UN DOMMAGE CORPOREL) N'EXCÉDERA LE MONTANT DE CINQUANTE DOLLARS (50,00 $). LES LIMITATIONS MENTIONNÉES CI-DESSUS S'APPLIQUERONT MÊME SI LE RECOURS INDIQUÉ FAIT DÉFAUT À SA VOCATION ESSENTIELLE.

9. Confidentialité et sécurité des données

9.1 Utilisation et divulgation des Données personnelles

Aux termes de la présente Entente, Apple, qui traitera les données en Votre nom, pourrait recevoir ou avoir accès à des Données personnelles si elles sont fournies par Vous ou en Votre nom. En concluant la présente Entente, Vous demandez à Apple de traiter et d'utiliser ces Données personnelles pour fournir et maintenir le Service conformément à la loi applicable, à Vos instructions données par le biais de l'utilisation du Service (par exemple, les instructions données par le biais du Service) et à toutes autres instructions écrites que Vous avez données et qui sont acceptées et reconnues par écrit par Apple, et Apple traitera uniquement les Données personnelles conformément à ces instructions reçues, sauf si la loi l'exige, auquel cas Apple Vous informera de cette exigence juridique avant le traitement, à moins que la loi n'interdise cette information pour des raisons importantes d'intérêt public. Apple peut fournir des données personnelles aux Sous-traitants qui font la prestation de services à Apple en relation avec le Service. Vous autorisez Apple à utiliser toutes les entités Apple incluses dans la définition d'« Apple » en tant que Sous-traitants et à utiliser tout autre Sous-traitant, à condition que ces Sous-traitants soient liés par des obligations contractuelles de protection des données au moins aussi protectrices que celles de la présente Entente. La liste des Sous-traitants est disponible à l'adresse https://www.apple.com/legal/enterprise/data-transfer-agreements/subprocessors_us.pdf. Si un Sous-traitant ne remplit pas ses obligations en matière de protection des données, Apple reste responsable envers Vous de l'exécution des obligations de ce Sous-traitant dans la mesure requise par la loi applicable.

9.2 Incidents de données

Si Apple apprend que des Données personnelles ont été modifiées, supprimées ou perdues à la suite d'un accès non autorisé au Service (un « Incident de données »), Apple informera l'Institution sans retard indu si la loi l'exige, et Apple prendra des mesures raisonnables pour minimiser les dommages et sécuriser les données. La notification par Apple d'un Incident de données ou son intervention concernant cet incident ne sauront être interprétées comme une reconnaissance par Apple de toute responsabilité en ce qui a trait à un Incident de données. L'Institution est responsable de se conformer aux lois applicables en matière de notification d'incidents et de s'acquitter de toutes les obligations des tiers liées aux Incidents de données. Apple n'accédera pas au contenu de vos données personnelles pour déterminer si l'information est soumise à toute obligation légale précise.

9.3 Procédures de sécurité; conformité

Apple utilisera des mesures types de l'industrie pour protéger les Données personnelles lors du transfert, du traitement et du stockage de Données personnelles dans le cadre du Service. Dans le cadre de ces mesures, Apple fera des efforts commercialement raisonnables pour chiffrer les Données personnelles au repos et lors de la transmission; pour assurer la confidentialité, l'intégrité, la disponibilité et la résilience continues du Service; en cas de problème, restaurer la disponibilité des Données personnelles en temps opportun; et tester et évaluer régulièrement l'efficacité de ces mesures. Apple prendra les mesures nécessaires pour garantir le respect des procédures de sécurité par ses employés, ses entrepreneurs et ses Sous-traitants et Apple s'assurera que toutes les personnes autorisées à traiter des Données personnelles respecteront les lois applicables portant sur la confidentialité et la sécurité des Données personnelles dans le cadre du Service. Les données personnelles chiffrées peuvent être stockées à un emplacement au choix d'Apple. Dans la mesure où Apple traite des données, Apple Vous aidera à garantir Votre conformité, le cas échéant, aux articles suivants : (a) l'article 28 du RGPD ou d'autres obligations équivalentes en vertu de la loi (en mettant à disposition toutes les informations nécessaires; en autorisant et en participant aux audits (à condition que les certifications ISO 27001 et ISO 27018 d'Apple soient considérées comme suffisantes aux fins de tels audits requis) et en Vous informant, comme requis par la loi applicable, si, de l'avis d'Apple, l'une de Vos instructions enfreint le RGPD ou d'autres dispositions de l'Union européenne ou d'un État membre de l'Union européenne en matière de protection des données); (b) l'article 32 du RGPD ou d'autres obligations équivalentes en vertu de la loi (notamment en mettant en œuvre les procédures de sécurité énoncées dans le présent article 9.3 et en maintenant les certifications ISO 27001 et ISO 27018); (c) les articles 33 et 34 du RGPD ou d'autres obligations équivalentes en vertu de la loi (en Vous aidant à fournir la notification requise d'un Incident de données à une autorité de contrôle ou à des personnes concernées); (d) les articles 35 et 36 du RGPD ou d'autres obligations équivalentes en vertu de la loi obligeant l'Institution à effectuer des évaluations d'impact sur la protection des données ou à consulter une autorité de contrôle avant le traitement; (e) une enquête par un organisme de réglementation de la protection des données ou une autorité similaire concernant les Données personnelles; et (f) Votre obligation de répondre à la demande d'exercice des droits de la personne concernée en vertu du RGPD ou d'autres obligations équivalentes en vertu de la loi, en tenant compte de la nature du traitement par des mesures techniques et organisationnelles appropriées, dans la mesure du possible.

9.4 Accès et transfert de données; résiliation; Institution traitant des données

Si la loi l'exige, Apple veillera à ce que tout transfert international de données se fasse uniquement vers un pays qui assure un niveau de protection adéquat, a fourni les garanties appropriées comme définies dans la loi applicable, telles que celles des articles 46 et 47 du RGPD (par exemple, dispositions standard de protection des données), ou fait l'objet d'une dérogation à l'article 49 du RGPD. Ces garanties peuvent inclure les clauses contractuelles types convenues par Apple, ou d'autres accords de transfert de données, que Vous acceptez de conclure si Votre juridiction l'exige, tels qu'exécutés par Apple à l'adresse https://www.apple.com/legal/enterprise/datatransfer/. Le transfert international par Apple de Données personnelles collectées dans les pays de la Coopération économique pour l'Asie-Pacifique (APEC) se conforme au système de règles transfrontalières de protection de la vie privée (CBPR) et au système de reconnaissance de la vie privée pour les sous-traitants de données (PRP) de l'APEC pour le transfert des données personnelles. En cas de questions ou de préoccupations non résolues concernant notre certification CBPR ou PRP de l'APEC, il est possible de communiquer avec notre prestataire tiers de règlement des litiges. Apple n'est pas responsable des données que Vous stockez ou transférez en dehors du système Apple. Lors de la résiliation de la présente Entente pour quelque raison que ce soit, Apple détruira de façon sécuritaire les Données personnelles stockées par Apple dans le cadre de Votre utilisation du Service dans un délai raisonnable, sauf pour prévenir les fraudes ou autrement requis par la loi. Dans la mesure où l'Institution conclut la présente Entente en tant que traiteur de données pour une Entité autorisée, l'Institution déclare et garantit qu'elle conclut la présente Entente en son

nom et, dans la mesure limitée énoncée dans les présentes, au nom d'une telle Entité autorisée. L'Institution déclare qu'elle détient les consentements applicables de cette Entité autorisée pour conclure la présente Entente et engager Apple en tant que sous-traitant au nom de cette entité, et est responsable envers Apple de toute réclamation de ces Entités autorisées à cet égard.

9.5 Accès aux produits et aux services de tiers

Si Vous choisissez d'utiliser, de télécharger, d'installer ou d'autoriser des produits ou des services de tiers qui sont compatibles avec le Service, mais qui n'en font pas partie, ou encore, d'y accéder, le Service peut permettre à ces produits ou services d'accéder aux Données personnelles, si l'utilisation des tels produits ou services de tiers le nécessite. Certains de ces produits ou services tiers peuvent également donner à Apple un accès aux Données personnelles, par exemple si Vous permettez à vos utilisateurs autorisés de se connecter au Service par l'intermédiaire de fournisseurs d'identité fédérés. Vous n'êtes pas tenu d'utiliser ces produits ou services additionnels dans le cadre du Service, et Votre Administrateur peut restreindre l'utilisation de ceux-ci, conformément à la présente Entente. Avant d'accéder à des produits ou à des services de tiers, de les utiliser, de les télécharger, de les installer ou de les activer pour une utilisation avec un Identifiant Apple géré, Vous devez passer en revue les modalités, les politiques et les pratiques de ces produits et services pour savoir quelles sont les données qu'ils peuvent recueillir auprès de Vos Utilisateurs autorisés, comment ces données peuvent être utilisées, partagées et stockées, et, le cas échéant, si ces pratiques sont compatibles avec les consentements que Vous avez obtenus.

9.6 Autre

Apple peut divulguer vos Données personnelles si elle le juge nécessaire et raisonnable, et ce, afin de faire respecter ses conditions générales ou pour protéger ses activités ou ses utilisateurs. De plus, advenant une réorganisation, une fusion ou une vente, Apple pourrait transférer, en tout ou en partie, toutes les Données personnelles recueillies au tiers concerné. CES NORMES DE DIVULGATION NE S'APPLIQUENT PAS AUX PRATIQUES DE COLLECTE DE DONNÉES DE N'IMPORTE QUEL CONTENU (Y COMPRIS CELLE EFFECTUÉE PAR LES APPS DE TIERS). AVANT L'ACHAT OU LE TÉLÉCHARGEMENT DE CONTENU DANS LE CADRE DU SERVICE, VOUS DEVRIEZ PASSER EN REVUE LES CONDITIONS, LES POLITIQUES ET LES PRATIQUES RELATIVES À UN TEL CONTENU. Si Apple reçoit une demande de Données personnelles de tiers (« Demande de tiers »), Apple Vous informera, dans la mesure permise par la loi, de la réception de la Demande de tiers et avisera le demandeur de Vous adresser cette Demande de tiers. Sauf disposition contraire de la loi ou des modalités de la demande de tiers, Vous serez responsable de répondre à la Demande.

10. Cadre juridique général

10.1 Avis de tiers

Des parties du Logiciel Apple ou du Service peuvent utiliser ou comprendre des logiciels de tiers et d'autre matériel sujet à des droits d'auteur. Les remerciements, les modalités d'octroi de licence et les avis de non-responsabilité relatifs à ce matériel sont inclus dans la documentation électronique du Service ou de la partie du Service concernée, et Votre utilisation d'un tel matériel est sujette à ces conditions.

10.2 Autre collecte et utilisation de données

Apple et ses entreprises affiliées et mandataires peuvent recueillir, tenir à jour, traiter et utiliser des renseignements techniques, de diagnostic, d'utilisation et toute autre information connexe, y compris, mais sans s'y limiter, les identifiants de système uniques, ou de matériel, les fichiers témoins ou les adresses IP, les renseignements concernant l'utilisation du Service par Vous et Vos Utilisateurs autorisés, Votre serveur de GAM, vos Paramètres d'inscription d'appareil, Vos ordinateurs, Vos appareils, Votre système d'exploitation, Vos applications logicielles et Vos périphériques, recueillis périodiquement pour assurer et améliorer le Service, pour fournir, tester et améliorer des produits et services d'Apple, pour des raisons internes telles que des vérifications,

analyses de données et recherche afin d'améliorer les produits, les services et les communications d'Apple, pour Vous fournir plus facilement des logiciels ou des mises à jour logicielles, de l'assistance pour les produits et d'autres fonctionnalités liées au Service ou à tout logiciel, à des fins de sécurité et de gestion de comptes, et pour vérifier le respect des dispositions de la présente Entente. La collecte des données en vertu de cet article sera traitée conformément à la Politique de confidentialité d'Apple, qui peut être consultée à l'adresse www.apple.com/legal/privacy/fr-ca/.

10.3 Cession

La présente Entente est incessible et vos obligations dans le cadre de celle-ci ne peuvent pas être déléguées, en tout ou en partie, ni par Vous ni par la loi, ni à la suite d'une fusion, ni par aucun autre moyen, sans en avoir obtenu préalablement le consentement par écrit d'Apple, et toute tentative de cession sans un tel consentement sera considérée comme nulle et non avenue.

10.4 Communiqués de presse et autres types de publicité; relation entre les parties

Vous ne pouvez pas publier de communiqués de presse ou faire toute autre déclaration publique concernant la présente Entente, ses conditions générales ou la relation entre les parties, sans l'autorisation écrite expresse et préalable d'Apple, qui se réserve le droit à sa seule discrétion de refuser un tel consentement. La présente Entente ne peut être interprétée comme créant une relation de mandataire, un partenariat, une coentreprise, une obligation fiduciaire ou toute autre forme d'association juridique entre Apple et Vous et Vous ne prétendrez pas le contraire, que ce soit de manière explicite ou implicite, en apparence ou autrement. Cette Entente ne s'adresse pas à des tiers.

10.5 Avis

Tout avis concernant la présente Entente doit être soumis par écrit. Les avis seront considérés comme donnés par Apple lorsqu'ils Vous seront envoyés à l'adresse courriel ou postale que Vous avez fournie durant le processus d'inscription. Tout avis destiné à Apple au sujet de la présente Entente sera considéré comme étant reçu (a) lorsqu'il est remis en personne, (b) trois jours ouvrables après l'avoir envoyé par un service de messagerie commerciale de nuit avec preuve de livraison écrite, et (c) cinq jours ouvrables après l'avoir envoyé par courrier rapide ou recommandé, port payé, à l'adresse suivante : Apple Inc., Apple Developer Legal (Apple Business Manager), One Apple Park, 37-2ISM, Cupertino, California 95014 États-Unis. Vous consentez à recevoir des notifications par courriel et acceptez que de tels avis envoyés électroniquement par Apple satisferont à toute exigence juridique de communication. L'une des parties peut changer son adresse courriel ou postale en donnant avis à l'autre par écrit comme décrit ci-dessus.

10.6 Divisibilité

Si un tribunal compétent juge qu'une disposition de la présente Entente est inapplicable pour quelque raison que ce soit, cette disposition sera appliquée dans toute la mesure autorisée de sorte à respecter l'intention des parties, et les autres dispositions de la présente Entente demeureront entièrement en vigueur. Toutefois, si la loi applicable interdit ou restreint Votre conformité complète avec les articles de cette Entente intitulés « Exigences du Service » ou « Obligations de l'Institution », ou si elle entrave le caractère exécutoire de ces articles, cette Entente sera immédiatement résiliée et Vous devrez interrompre immédiatement toute utilisation du Service.

10.7 Renonciation et interprétation

Si Apple ne fait pas respecter une disposition quelconque de la présente Entente, cela ne constitue pas une renonciation au droit d'Apple de faire respecter cette disposition ou toute autre disposition ultérieurement. Toute loi ou tout règlement qui soutient que la langue d'un contrat peut être interprétée à l'encontre de son rédacteur ne s'applique pas à cette Entente. Les en-têtes des articles ont été introduits dans cette Entente uniquement à des fins pratiques et ne peuvent pas être pris en considération dans l'analyse ou l'interprétation de celle-ci.

10.8 Contrôle des exportations

Vous ne pouvez pas utiliser, exporter, réexporter, importer, vendre ou transférer le Service ou les Logiciels Apple, ou une partie de ceux-ci, sauf lorsque autorisé par la législation des États-Unis, par les lois du territoire dans lequel Vous avez obtenu le Service ou les Logiciels Apple, ou par toute autre loi ou tout autre règlement applicable. Entre autres, mais sans limitations, le Service et les Logiciels Apple ne peuvent être exportés ni réexportés (a) vers tout pays soumis à un embargo des États-Unis ou (b) vers toute personne figurant sur la « Specially Designated Nationals List » du Treasury Department des États-Unis, la « Denied Persons List » ou l'« Entity List » du Department of Commerce des États-Unis, ou toute autre liste de parties non autorisées. En utilisant le Service et les Logiciels Apple, Vous déclarez et garantissez ne pas être établi dans l'un de ces pays ou inscrit sur l'une des listes susmentionnées. Vous acceptez également de ne pas utiliser le Service ou les Logiciels Apple à des fins proscrites par la législation des États-Unis, y compris, mais sans s'y limiter, le développement, la conception, la fabrication ou la production de missiles ou d'armes nucléaires, chimiques ou biologiques.

10.9 Utilisateurs finaux gouvernementaux

Le Service, les Logiciels Apple et la Documentation constituent des « Éléments commerciaux » (Commercial Items), tel que ce terme est défini dans 48 C.F.R. § 2.101, et consistent en un « Logiciel commercial » (Commercial Computer Software) et en de la « Documentation relative à un logiciel commercial » (Commercial Computer Software Documentation), tel que ces termes sont utilisés dans 48 C.F.R. § 12.212 ou 48 C.F.R. §227.7202, selon le cas. Conformément à 48 C.F.R. § 12.212 ou à 48 C.F.R. §227.7202-1 à 227.7202-4, selon le cas, le « Commercial Computer Software » et la « Commercial Computer Software Documentation » sont fournis sous licence aux utilisateurs finaux du gouvernement des États-Unis (a) uniquement comme « Commercial Items » et (b) uniquement assortis des droits accordés à tous les autres utilisateurs finaux conformément aux présentes conditions générales. Les droits non publiés sont réservés en vertu de la législation des droits d'auteur en vigueur aux États-Unis.

10.10 Règlement de litiges; droit applicable

Tout règlement de litige ou de tout autre différend entre Apple et Vous découlant de la présente Entente, des Logiciels Apple ou de Votre relation avec Apple, ou lié à ceux-ci, se déroule devant un tribunal fédéral du district nord de la Californie, et Apple et Vous reconnaissez par la présente la compétence personnelle et le lieu exclusif de ce district pour ce qui est de ce règlement de litige ou différend. La présente Entente est régie par les lois des États-Unis et de l'État de Californie et interprétée selon ces lois, à l'exception de l'ensemble des lois portant sur le conflit de lois de l'État de la Californie. Nonobstant ce qui précède :

(a) si Vous êtes une agence, un intermédiaire ou un département du gouvernement fédéral des États-Unis, cette Entente est régie conformément aux lois des États-Unis d'Amérique, et en absence d'une loi fédérale applicable, aux lois de l'État de la Californie. En outre, et nonobstant toute disposition contraire dans la présente Entente (y compris, mais sans s'y limiter, l'article 5 [« Indemnisation »]), toute réclamation, demande, plainte ou contestation est assujettie à la Contract Disputes Act (41 U.S.C. §§ 601-613), à la Tucker Act (28 U.S.C. § 1346(a) et § 1491), ou à la Federal Tort Claims Act (28 U.S.C. §§ 1346(b), 2401-2402, 2671-2672, 2674-2680), selon le cas, ou à toute autre autorité applicable. Pour éviter tout doute, si Vous êtes une agence, un intermédiaire ou un département du gouvernement fédéral, du gouvernement d'un État ou d'un gouvernement municipal aux États-Unis, ou si Vous êtes un établissement d'éducation publique accrédité des États-Unis, vos obligations d'indemnisation ne s'appliquent que dans la mesure où elles ne Vous obligent pas à violer une loi applicable (par exemple, l'Anti-Deficiency Act) et où Vous détenez toute autorisation ou toute loi habilitante;

(b) Si Vous (en tant que partie à la présente Entente) êtes un établissement d'enseignement public agréé des États-Unis, ou une agence, un intermédiaire ou un département du gouvernement d'un État ou du gouvernement municipal à l'intérieur des États-Unis, alors (i) la présente Entente est régie et interprétée conformément aux lois de l'État (au sein des États-Unis) où Votre entité est établie, à l'exception des principes de conflit de droit en vigueur dans certains États; et (ii) tout règlement de litige ou de tout autre différend entre Apple et Vous découlant de la présente Entente, des Logiciels Apple ou de Votre relation avec Apple, ou lié à ceux-ci, se déroule devant un tribunal fédéral du district nord de la Californie, et Apple et Vous reconnaissez par la présente la compétence personnelle et le lieu exclusif de ce district, sauf si les lois de l'État où se trouve Votre entité l'interdisent expressément;
(c) Si Vous êtes une organisation internationale ou intergouvernementale qui a reçu une immunité de la part des tribunaux nationaux compétents par le biais de votre charte ou entente intergouvernementale, toute réclamation ou tout litige résultant de ou en relation avec la présente entente, ou tout manquement à celle-ci, sera soumis à une procédure d'arbitrage régie par les les règles d'arbitrage de la Chambre de commerce internationale (les « règles ICC ») en vigueur au moment de la demande d'arbitrage, sous l'égide de trois arbitres nommés conformément auxdites règles et conformément au règlement de l'Association internationale du barreau sur les preuves en arbitrage international (Taking of Evidence in International Arbitration). L'arbitrage aura lieu à Londres, au Royaume-Uni. L'arbitrage se déroulera en anglais. Vous acceptez de fournir des preuves de Votre statut d'organisme intergouvernemental détenant de tels privilèges et immunités à la demande d'Apple; et
(d) Si Vous résidez dans un pays de l'Union européenne, en Islande, en Norvège, en Suisse ou au Royaume-Uni, la législation applicable et le tribunal compétent sont ceux du pays du lieu de résidence de l'entité Apple qui vous fournit le Service, selon le cas, tel qu'il est énoncé dans la définition d'« Apple ».

La présente Entente n'est pas régie par la Convention des Nations unies sur les contrats de vente internationale de marchandises, dont l'application est expressément exclue.

10.11 Intégralité de l'Entente; langue prévalente

La présente Entente constitue l'intégralité du contrat entre les parties relativement à l'utilisation du Service comme considéré ci-dessous, et remplace tous les accords et toutes les ententes antérieurs relativement à son objet. Pou éviter tout doute, rien dans cette Entente ne remplace les CLUF des Logiciels Apple. La présente Entente ne peut être modifiée que : (a) par un amendement écrit signé par les deux parties, ou (b) dans la mesure expressément autorisée par la présente Entente (par exemple, par Apple, en vous envoyant un avis). Toute traduction de la présente Entente Vous est fournie par courtoisie, et dans le cas d'un conflit entre la version anglaise et toute autre version dans une autre langue, la version anglaise de la présente Entente prévaut, dans la mesure où la loi de Votre territoire ne l'interdit pas. Si Vous êtes situé dans la province de Québec, au Canada, ou si Vous êtes un organisme gouvernemental en France, la disposition suivante s'applique : The parties hereby confirm that they have requested that this Agreement and all related documents be drafted in English. *Les parties ont exigé que la présente Entente et tous les documents connexes soient rédigés en anglais.*

10.12 Acceptation

L'Institution reconnaît et accepte qu'en cliquant sur le bouton « Accepter » ou sur tout autre bouton ou case à cocher semblable, l'Institution, à travers son représentant autorisé, accepte les conditions de cette Entente.

LYL111
3/31/2022

PLEASE READ THE FOLLOWING APPLE BUSINESS MANAGER TERMS AND CONDITIONS CAREFULLY BEFORE USING THE SERVICE. THESE TERMS AND CONDITIONS CONSTITUTE A LEGAL AGREEMENT BETWEEN INSTITUTION AND APPLE. BY CLICKING ON THE "AGREE" BUTTON, INSTITUTION, THROUGH ITS AUTHORIZED REPRESENTATIVE, IS AGREEING TO BE BOUND BY AND IS BECOMING A PARTY TO THIS AGREEMENT. IF INSTITUTION DOES NOT OR CANNOT AGREE TO THIS AGREEMENT, THEN CLICK THE "CANCEL" BUTTON. IF INSTITUTION DOES NOT AGREE TO THIS AGREEMENT, THEN INSTITUTION IS NOT PERMITTED TO PARTICIPATE.

Apple Business Manager Agreement

Purpose

This Agreement permits You to participate in Apple Business Manager, which allows You to automate enrollment of Apple-branded devices for Mobile Device Management (MDM) within Your Institution, to purchase and manage content for such devices, to create Managed Apple IDs for Your users, and to access facilitation tools for related services.

Note: You will need to have an MDM solution (e.g., from a third-party developer) enabled within Your Institution so that you can utilize the features of this Service. An MDM solution enables You to configure, deploy, and manage Apple-branded devices. For more information, see https://www.apple.com/business/resources/.

1. Definitions

Whenever capitalized in this Agreement:

"Administrators" means employees or Contract Employees (or Service Providers) of Institution who have been added to the Service for purposes of account management, e.g., administering servers, uploading MDM provisioning settings, adding devices to Your account, purchasing content, and performing other related services.

"Agreement" means this Apple Business Manager Agreement.

"Apple" means the following, unless otherwise specified herein: (a) **Apple Inc**., located at One Apple Park Way, Cupertino, California 95014, U.S.A., for Institutions in North, Central, and South America (excluding Canada), as well as United States territories and possessions; and French and British possessions in North America, South America, and the Caribbean; (b) **Apple Canada Inc.**, located at 120 Bremner Blvd., Suite 1600, Toronto ON M5J 0A8, Canada, for Institutions in Canada or its territories and possessions; (c) **iTunes K.K.**, located at Roppongi Hills, 6-10-1 Roppongi, Minato-ku, Tokyo 106-6140, Japan, for Institutions in Japan; (d) **Apple Pty Limited**, located at 20 Martin Place, Sydney NSW 2000, Australia, for Institutions in Australia and New Zealand, including island possessions, territories, and affiliated jurisdictions; and (e) **Apple Distribution International Ltd.**, located at Hollyhill Industrial Estate, Hollyhill, Cork, Republic of Ireland, for Institutions in all other countries or territories not specified above in which the Service is offered.

"Apple Services" means the App Store, Apple Books, Apple Online Store, AppleCare, iCloud, and other Apple services as available to Your Authorized Users under this Agreement.

"Apple Software" means the iOS, iPadOS, macOS, tvOS, and watchOS operating system software, or any successor versions thereof.

"Authorized Devices" means Apple-branded devices that are owned or controlled by You, have been designated for use by Authorized Users or Permitted Users only, and that are eligible for use

in the Service. For the avoidance of doubt, devices that are personally-owned by an individual (e.g., "BYOD" devices) are not permitted to be enrolled in supervised device management (e.g., configured with Device Enrollment Settings) as part of the Service, unless otherwise agreed by Apple in writing, and not all devices are eligible to be added to the Service.

"Authorized Users" means employees and Contract Employees (or Service Providers) of Your Institution, and if You are a hospital, the term "Authorized Users" also includes credentialed physicians, referring physicians and clinicians). For clarity, You may request, and Apple may approve, in its sole discretion, other similar users to be included as "Authorized Users"; however, no other parties shall be included in this definition without Apple's prior written consent.

"Content" means any material or information that may be licensed or acquired as part of the Service pursuant to Apple's Volume Content Terms (e.g., Apps from the App Store).

"Contract Employees" means individuals who perform work or provide services on behalf of an entity on a non-piece-rate basis and who have internal use access to the entity's private information technology systems (e.g., VPN) and/or secured physical premises (e.g., badge access to corporate facilities).

"Device Enrollment Settings" means settings for an Apple-branded device that can be configured and managed as part of the Service, including but not limited to the initial enrollment flow for a device, and settings to supervise a device, make configuration mandatory, or lock an MDM profile.

"Documentation" means the technical or other specifications or documentation that Apple may provide to You for use in connection with the Service.

"End User License Agreement" or **"EULA"** means the software license agreement terms and conditions for the Apple Software.

"Managed Apple ID(s)" means a user account (including but not limited to storage, calendar, notes, and contacts) that You create and deploy through the use of the Service.

"MDM Server(s)" means computers owned or controlled by You (or a Service Provider acting on Your behalf) that have been designated to communicate with the Service.

"**Permitted Entity(ies)**" means: (a) if You are a vehicle manufacturer, Your authorized vehicle dealerships and certified service partners; (b) if You are a hotel holding company, hotel properties operating under Your name, trademark or brand (or a name, trademark or brand it owns or controls); or (c) if You deploy an app on Authorized Devices in Restricted App Mode (e.g., a point-of-sale provider who deploys its app-based payment system on iPads), Your customers who are using such app in Restricted App Mode on the Authorized Device. Further, any such app must be developed and distributed in accordance with the terms of the Apple Developer Program License Agreement (e.g., distribution of a Custom App). For clarity, You may request, and Apple may approve, other entities similar to those identified in subsections (a) and (b) above; however, no other entity shall be included in this definition without Apple's prior written consent.

"Permitted Users" means employees and Contract Employees of Your Permitted Entity.

"Personal Data" means data that can be reasonably used to identify an individual that is under the control of the Institution under this Agreement.

"Restricted App Mode" means when an Apple-branded device is supervised and configured through the Service such that (a) the device automatically launches and is locked into a single

application upon activation and no other operating system functionality can be accessed; or (b) the device cannot be personalized by an end-user (e.g. the device settings prohibit the Mail app from configuration with personal credentials, Content cannot be acquired from the App Store with a personal Apple ID, etc.).

"Service" means the Apple Business Manager service (and any components, functionality or features thereof) for automated mobile device management enrollment, acquisition and management of Content, the creation, use, and management of Managed Apple IDs, iCloud storage connected to a Managed Apple ID, the use of Administrator accounts, and other related services as contemplated in this Agreement, including the web portal and any services or tools provided hereunder.

"Service Provider" means a third-party who provides a service on Your behalf in accordance with the terms of this Agreement.

"Server Token" means the combination of Your public key, Apple ID and a token provided by Apple that permits Your MDM Server(s) to be registered with the Service.

"Sub-processor" means a third party that performs certain tasks on Apple's behalf, such as processing or storing data and providing customer service, in connection with Apple's provision of the Service.

"You," "Your," and "Institution" means the institution entering into this Agreement. For the avoidance of doubt, the Institution is responsible for compliance with this Agreement by its employees, Contract Employees, and Service Providers who are authorized to exercise rights under this Agreement on its behalf.

Note: If you are a third-party service provider, you need to have the Institution with whom you are working enter into this Agreement and add you as an Administrator since the entity that owns the Authorized Devices and plans to distribute such Devices to its Authorized Users must enroll in the Service.

2. Service Requirements

2.1 Use of the Service

As a condition to using the Service, Institution acknowledges and agrees that:

(a) Institution is permitted to use the Service only for the purposes and in the manner expressly permitted by this Agreement and in accordance with all applicable laws and regulations, and the Documentation;

(b) Institution is not permitted to use the Service (or any part thereof) for any unlawful, improper, inappropriate, or illegal activity;

(c) Institution is permitted to use the Service to manage Authorized Devices for use only by Authorized Users and Permitted Users and not for general deployment to third parties (except as otherwise expressly permitted herein), and Institution will be responsible for all use of the Authorized Devices by such users, including but not limited to obtaining consents and providing appropriate information to users about the managed features of such devices;

(d) Institution will be responsible for all use of the Service by its Permitted Entities (and any Permitted Users of the Permitted Entity), and any actions undertaken by its Permitted Entity shall be deemed to have been taken by Institution, and Institution (in addition to its Permitted Entity) shall be responsible to Apple for all such actions.

(e) Institution will obtain all necessary rights and consents from its Authorized Users and Permitted Users to deploy its Authorized Devices as permitted hereunder;

(f) Institution will have the rights to purchase and manage Content as may be permitted through the Service and will comply with all applicable terms for the use of Content;

(g) Institution will obtain all necessary rights and consents from its Authorized Users where necessary to create Managed Apple IDs and to allow Apple to provide the Service for Managed Apple IDs (including using and maintaining Personal Data);
(h) Institution may add Administrators to the Service, but only if such individuals are employees or Contract Employees of Institution or are Service Providers acting on Institution's behalf, and Institution may add such parties only for account management purposes; and
(i) Institution is permitted to use the Service only for its own (and its Permitted Entity's) internal business operations and information technology purposes and is not permitted to provide a device or service to third parties (other than to a Permitted Entity that is covered under subsection (c) of the "Permitted Entity" definition) that integrates with or leverages services or information provided by the Service or uses the Service in any way, or as otherwise agreed by Apple in writing.

2.2 No Other Permitted Uses

Institution agrees not to exploit the Service in any unauthorized way whatsoever, including, but not limited to, by trespass, burdening network capacity, or uploading malicious code. Any attempt to do so is a violation of the rights of Apple and its licensors. Institution may not license, sell, share, rent, lease, assign, distribute, host, permit timesharing or service bureau use, or otherwise make the Service (or any components thereof) available to any third-party, except as expressly permitted in this Agreement. Institution agrees that it will not use the Service to stalk, harass, mislead, abuse, threaten or harm or pretend to be anyone other than the entity that has enrolled, and Apple reserves the right to reject or block any accounts that could be deemed to be an impersonation or misrepresentation of another entity or person's name or identity. Institution will not interfere with the Service, or with any security, digital signing, digital rights management, verification or authentication mechanisms implemented in or by the Service or by the Apple Software or any other related Apple software or technology, or enable others to do so. If Institution is a covered entity, business associate, representative of a covered entity or business associate (as those terms are defined at 45 C.F.R § 160.103), or otherwise a health care provider or entity, Institution agrees that it will not use any component, function or other facility of the Service to create, receive, maintain or transmit any "protected health information" (as such term is defined at 45 C.F.R § 160.103) or equivalent health data under applicable law, or use the Service in any manner that would make Apple a business associate of Institution or any third-party or otherwise directly subject Apple to applicable health privacy laws. All rights not expressly granted in this Agreement are reserved and no other licenses, immunity or rights, express or implied are granted by Apple, by implication, estoppel, or otherwise.

2.3 Server Token Usage

Institution agrees to use the Server Token only for purposes of enrolling Institution's MDM Server into the Service and uploading Device Enrollment Settings that will be sent to Authorized Devices when they are initially activated by Authorized Users and Permitted Users. Institution agrees not to provide or transfer its Server Token to any other entity or share it with any other entity, excluding its Service Provider. Institution agrees to take appropriate measures to safeguard the security and privacy of such Server Token and to revoke it if it has been compromised or Institution has reason to believe it has been compromised. Apple reserves the right to revoke or disable Server Tokens at any time in its sole discretion. Further, Institution understands and agrees that regenerating the Server Token will affect Institution's ability to use the Service until a new Server Token has been added to the MDM Server.

2.4 EULAs Term and Conditions

As part of the Service, Institution may elect to have its Authorized Users and Permitted Users accept the terms and conditions for the Apple Software outside of the normal initial activation process on a device. Institution may use this feature of the Service as long as Institution agrees to the following requirements:
(a) Institution's authorized representative must accept the EULAs for the Apple Software on the

Service web portal prior to deploying Authorized Devices running such Apple Software to Authorized Users and Permitted Users;
(b) If the EULAs for the Apple Software have changed, Institution agrees to have its authorized representative return to the Service web portal and accept such EULAs promptly upon notice from Apple in order to continue using the Service. Institution acknowledges that it will not be able to use the Service, including associating additional Authorized Devices with its MDM Server, until such EULAs have been accepted;
(c) Institution is responsible for ensuring that such EULAs are provided to Authorized Users and Permitted Users, and that each Authorized User and Permitted User is aware of and complies with the terms and conditions of the EULAs for the Apple Software; and
(d) Institution agrees to be responsible for obtaining any required consents for Authorized Users' and Permitted Users' use of the Apple Software.

2.5 Device Transfer
Institution will not resell any Authorized Devices with Device Enrollment Settings enabled and agrees to remove such Devices from the Service prior to reselling them or transferring them to third parties in any way.

2.6 Purchasing Content
Acquisition of Content is automatically disabled in the Service, and Your use is subject to the restrictions of this Agreement and the terms governing the use of Apps and Books in the Service ("Volume Content Terms"). You may choose to enable Your Administrators to access Content through the Service by granting them purchasing authority and allowing them to access Content. Subject to the Volume Content Terms and the restrictions of this Agreement, the Service enables You to allocate Content to Authorized Devices using device assignment or to Authorized Users or Permitted Users using user assignment and Apple IDs. You may assign (or revoke and re-assign) apps to Authorized Users and Authorized Devices in any country where such app is commercially available on the App Store or otherwise, subject to change at any time. With respect to books, You understand and agree that once You have assigned a book to an Authorized User or a Permitted User, such book is non-transferable, and You will not be able to revoke or re-assign the book. You are solely responsible for all such purchases and compliance with the applicable terms. You agree that You have the authority to and will accept such applicable terms on behalf of Your Authorized Users and Permitted Users if You (or Your Administrators) purchase or access Content as part of the Service. You understand and agree that Content may not be available in all countries or regions. You agree not to export Content for use outside of the country in which You are domiciled nor represent that You have the right or ability to do so. You agree not to circumvent the laws of any country or restrictions set forth by providers of the Content.

2.7 Administrator Accounts
You may create Administrator accounts for Your Administrators to use in administering the Service, subject to limits Apple may impose on the number of Administrator accounts. These Administrator accounts will be a combination of a unique user name and password, which will be owned by You. When You create Administrator accounts, all features and functionality of the Service that You select to be available will be enabled for such accounts, and You are responsible for appropriately enabling these Administrator accounts and for all activity in connection with these accounts (e.g., permitting Content purchases). You acknowledge and agree that these Administrator accounts may be used only to access and manage the Service for account management purposes. If You delete any Administrator accounts, then neither You nor the Administrator will have access to such Administrator accounts, and You acknowledge and agree that this action may not be reversible.

2.8 Managed Apple IDs
You may create Managed Apple IDs for Your Authorized Users to access and use as part of the Service in accordance with this Agreement and the Documentation. You are responsible for

deciding which features and functionality of the Service to enable for Your Authorized Users and for the creation, use, and management of Managed Apple IDs.

To create a Managed Apple ID for use by an Authorized User the following information, which may include Personal Data, is needed: name, proposed role, password, email address (for contact purposes), and phone number. In order to protect the security of Authorized Users' accounts and preserve Your ability to easily reset Your Authorized Users' passwords online, You should keep this information confidential. You agree to deploy Managed Apple IDs only for Your own internal business or information technology purposes and only to Your Authorized Users. You agree not to share, sell, resell, rent, lease, lend, or otherwise provide access to Managed Apple IDs to anyone other than Your Authorized Users. You may disable, suspend, or delete Managed Apple IDs (e.g., if an Authorized User leaves the Institution) in the Service. Apple reserves the right to limit the number of Managed Apple IDs that may be created for Your Authorized Users and the number of Authorized Devices associated with an account.

If You make available other Apple Services for Your Administrators, managers or staff to sign into, You agree to allow the Apple Services to store data in the accounts associated with those Authorized User's Managed Apple IDs, and for Apple to collect, store and process such data In association with Your and/or Your Authorized User's use of the Apple Service. You are responsible for ensuring that You and Your Authorized Users are in compliance with all applicable laws for each Managed Apple ID based on the Apple Service You allow Your Authorized Users to access. If Your Administrators, managers or staff access certain Apple Services, Apple may communicate with Your Authorized Users about their use of the Apple Service.

2.9 Permitted Entities and Permitted Users

Subject to the terms of this Agreement, Permitted Entities and Permitted Users may access the Service under Your account, excluding the use and deployment of Managed Apple IDs (unless otherwise separately approved in advance and in writing by Apple). You shall be responsible for compliance with the terms of this Agreement by the Permitted Entities and Permitted Users and shall be directly liable to Apple for any breach of this Agreement by Your Permitted Entities and Permitted Users. If You (or Service Provider acting on Your behalf) add Apple-branded devices to the Service that are owned by a Permitted Entity, You represent and warrant to Apple that the Permitted Entity has authorized You to add such devices, that You have control of such devices, and that You have the authority to accept EULAs on behalf of the Permitted Entity (and its Permitted Users, if applicable). Apple reserves the right to: set limitations on the Service features or functionality that Institution may allow its Permitted Entity (or Permitted Users) to access or use, and to require You to remove any Permitted Entities or Permitted Users from Your account at any time, in its sole discretion.

2.10 Updates; No Support or Maintenance

Apple may extend, enhance, suspend, discontinue, or otherwise modify the Service (or any part thereof) provided hereunder at any time without notice, and Apple will not be liable to You or to any third-party should it exercise such rights. Apple will not be obligated to provide Institution with any updates to the Service. If Apple makes updates available, the terms of this Agreement will govern such updates, unless the update is accompanied by a separate agreement in which case the terms of that agreement will govern. Should an update be made available, it may have features, services or functionality that are different from those found in the Service. Apple is not obligated to provide any maintenance, technical or other support for the Service.

2.11 Third-Party Service Providers

You are permitted to use a Service Provider only if the Service Provider's access to and use of the Service is done on Your behalf and in accordance with these terms, and is subject to a binding written agreement between You and the Service Provider with terms at least as restrictive and

protective of Apple as those set forth herein. Any actions undertaken by any such Service Provider in relation to the Service and/or arising out of this Agreement shall be deemed to have been taken by You, and You (in addition to the Service Provider) shall be responsible to Apple for all such actions (or any inactions). In the event that any actions or inactions by the Service Provider could constitute a violation of this Agreement or otherwise cause any harm, Apple reserves the right to require You to cease using such Service Provider.

3. Institution's Obligations

Institution represents and warrants that:

(a) Institution's authorized representative has the right and authority to enter into this Agreement on its behalf and to legally bind Institution to the terms and obligations of this Agreement;

(b) All information provided by Institution to Apple (or to its Authorized Users or Permitted Users) in connection with this Agreement or use of the Service (including the Apple Software) will be current, true, accurate, supportable and complete; and, with regard to information Institution provides to Apple, Institution will promptly notify Apple of any changes to such information;

(c) Institution will monitor and be responsible for its authorized representatives', Administrators', Service Providers', Authorized Users', Permitted Users', and Permitted Entities' use of the Service and their compliance with the terms of this Agreement;

(d) Institution will be solely responsible for all costs, expenses, losses and liabilities incurred, and activities undertaken by Institution, its authorized representatives, Administrators, Service Providers, Authorized Users, Permitted Users, Permitted Entities, and Authorized Devices, in connection with the Service;

(e) Institution is solely liable and responsible for ensuring compliance with all privacy and data protection laws (e.g., Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of Personal Data and on the free movement of such data, and repealing directive 95/46/EC ("GDPR")) regarding the use of the Service and use or collection of data, including Personal Data, and information through the Service;

(f) Institution is responsible for its activity related to Personal Data (e.g., safeguarding, monitoring, and limiting access to Personal Data, preventing and addressing inappropriate activity, etc.); and

(g) Institution will comply with the terms of and fulfill Institution's obligations under this Agreement.

4. Changes to Service Requirements or Terms

Apple may change the Service or the terms of this Agreement at any time. In order to continue using the Service, Institution, through its authorized representative, must accept and agree to the new requirements or terms of this Agreement. If You do not agree to the new requirements or terms, Your use of the Service, or any part thereof, may be suspended or terminated by Apple. You agree that Your acceptance of such new Agreement terms may be signified electronically, including without limitation, by checking a box or clicking on an "agree" or similar button.

5. Indemnification

To the extent permitted by applicable law, You agree to indemnify and hold harmless, and upon Apple's request, defend, Apple, its directors, officers, employees, affiliates, independent contractors and authorized representatives (each an "Apple Indemnified Party") from any and all claims, losses, liabilities, damages, expenses and costs, including without limitation attorneys' fees and court costs, (collectively, "Losses") incurred by an Apple Indemnified Party and arising from or related to any of the following: (a) Your breach of any certification, covenant, obligation, representation or warranty made in this Agreement; (b) Your use (including but not limited to Your Service Provider's, Administrators', Authorized Users', Permitted Users', and/or Permitted Entity's use) of the Service; (c) any claims, including but not limited to any end user claims, about Your use, deployment or management of Authorized Devices, Device Enrollment Settings, and/or MDM Servers; (d) any claims, including but not limited to any end user claims, about the provision, management, and/or use of Authorized Devices, Administrator accounts, Managed Apple IDs, or

Content, and/or any other use of the Service; and/or (e) any claims regarding Your use or management of Personal Data. In no event may You enter into any settlement or like agreement with a third-party that affects Apple's rights or binds Apple or any Apple Indemnified Party in any way, without the prior written consent of Apple.

6. Term and Termination

The term of this Agreement shall commence on the date You first accept this Agreement in the Service and extend for an initial period of one (1) year following the initial activation date of Your Service account by Apple. Thereafter, subject to Your compliance with the terms of this Agreement, the term of this Agreement will automatically renew for successive one (1) year terms, unless sooner terminated in accordance with this Agreement. Either party may terminate this Agreement for its convenience, for any reason or no reason, effective 30 days after providing the other party with written notice of its intent to terminate.

If You fail, or Apple suspects that You have failed, to comply with any of the provisions of this Agreement, Apple, at its sole discretion, without notice to You may: (a) terminate this Agreement and/or Your account; and/or (b) suspend or preclude access to the Service (or any part thereof). Apple reserves the right to modify, suspend, or discontinue the Service (or any part or content thereof) at any time without notice to You, and Apple will not be liable to You or to any third-party should it exercise such rights. Apple may also terminate this Agreement, or suspend Your rights to use the Services, if You fail to accept any new Agreement terms as described in Section 4. You acknowledge and agree that You may not be able to access the Service upon expiration or termination of this Agreement and that Apple reserves the right to suspend access to or delete data or information that You, Your Administrators, Authorized Users, Permitted Entities, or Permitted Users have stored through Your use of the Service. You should review the Documentation prior to using any part of the Service and make appropriate back-ups of Your data and information. Apple will not be liable or responsible to You or to any third party should it exercise such rights or for any damages that may result or arise out of any such termination or suspension. The following provisions shall survive the termination of this Agreement: Section 1, the second sentence of Section 2.9, Section 2.10, the second sentence of Section 2.11, Section 3, Section 5, the second paragraph of Section 6, and Sections 7, 8, 9, and 10.

7. DISCLAIMER OF WARRANTIES

YOU EXPRESSLY ACKNOWLEDGE AND AGREE THAT, TO THE EXTENT PERMITTED BY APPLICABLE LAW, YOUR USE OF, OR INABILITY TO USE, THE SERVICE, OR ANY TOOLS OR FEATURES OR FUNCTIONALITY ACCESSED BY OR THROUGH THE SERVICE, IS AT YOUR SOLE RISK AND THAT THE ENTIRE RISK AS TO SATISFACTORY QUALITY, PERFORMANCE, ACCURACY AND EFFORT IS WITH YOU.

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE SERVICE IS PROVIDED "AS IS" AND "AS AVAILABLE" WITH ALL FAULTS AND WITHOUT WARRANTY OF ANY KIND, AND APPLE, ITS DIRECTORS, OFFICERS, EMPLOYEES, AFFILIATES, AUTHORIZED REPRESENTATIVES, AGENTS, CONTRACTORS, RESELLERS, OR LICENSORS (COLLECTIVELY REFERRED TO AS "APPLE" FOR THE PURPOSES OF **SECTIONS 7** AND **8**) HEREBY DISCLAIM ALL WARRANTIES AND CONDITIONS WITH RESPECT TO THE SERVICE, EXPRESS, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES AND/OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, FITNESS FOR A PARTICULAR PURPOSE, ACCURACY, QUIET ENJOYMENT, TITLE, AND NON-INFRINGEMENT OF THIRD-PARTY RIGHTS.

APPLE DOES NOT GUARANTEE, REPRESENT OR WARRANT AGAINST INTERFERENCE WITH YOUR USE OR ENJOYMENT OF THE SERVICE, THAT THE FEATURES OR FUNCTIONALITY CONTAINED IN, OR SERVICES PERFORMED OR PROVIDED BY, THE

SERVICE WILL MEET YOUR REQUIREMENTS, WILL BE SECURE, THAT YOUR USE OF OR THAT THE OPERATION OF THE SERVICE WILL BE UNINTERRUPTED OR ERROR-FREE, THAT DEFECTS OR ERRORS WILL BE CORRECTED, THAT THE SERVICE WILL CONTINUE TO BE MADE AVAILABLE, THAT THE SERVICE WILL BE COMPATIBLE OR WORK WITH ANY THIRD PARTY SOFTWARE, APPLICATIONS, CONTENT, OR THIRD PARTY SERVICES OR ANY OTHER APPLE PRODUCTS OR SERVICES, OR THAT ANY DATA OR INFORMATION STORED OR TRANSMITTED THROUGH THE SERVICE WILL NOT BE LOST, CORRUPTED, DAMAGED, ATTACKED, HACKED, INTERFERED WITH OR SUBJECT TO ANY OTHER SECURITY INTRUSION. YOU AGREE THAT FROM TIME TO TIME APPLE MAY REMOVE THE SERVICE FOR INDEFINITE PERIODS OF TIME OR MODIFY, SUSPEND, DISCONTINUE, OR CANCEL THE SERVICE AT ANY TIME, WITHOUT NOTICE TO YOU.

YOU FURTHER ACKNOWLEDGE THAT THE SERVICE IS NOT INTENDED OR SUITABLE FOR USE IN SITUATIONS OR ENVIRONMENTS WHERE THE FAILURE OR TIME DELAYS OF, OR ERRORS OR INACCURACIES IN THE CONTENT, DATA OR INFORMATION PROVIDED BY OR THROUGH THE SERVICE COULD LEAD TO DEATH, PERSONAL INJURY, OR SEVERE PHYSICAL OR ENVIRONMENTAL DAMAGE, INCLUDING WITHOUT LIMITATION THE OPERATION OF NUCLEAR FACILITIES, AIRCRAFT NAVIGATION OR COMMUNICATION SYSTEMS, AIR TRAFFIC CONTROL, LIFE SUPPORT, OR WEAPONS SYSTEMS.

NO ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY APPLE OR AN APPLE AUTHORIZED REPRESENTATIVE SHALL CREATE A WARRANTY NOT EXPRESSLY STATED IN THIS AGREEMENT. SHOULD THE SERVICE PROVE DEFECTIVE, YOU ASSUME THE ENTIRE COST OF ALL NECESSARY SERVICING, REPAIR, OR CORRECTION.

8. LIMITATION OF LIABILITY

TO THE EXTENT NOT PROHIBITED BY APPLICABLE LAW, IN NO EVENT SHALL APPLE BE LIABLE FOR PERSONAL INJURY, OR ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES WHATSOEVER, INCLUDING WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, CORRUPTION OR LOSS OF DATA OR INFORMATION, FAILURE TO TRANSMIT OR RECEIVE ANY DATA OR INFORMATION, BUSINESS INTERRUPTION OR ANY OTHER COMMERCIAL DAMAGES OR LOSSES ARISING OUT OF THIS AGREEMENT AND/OR YOUR USE OR INABILITY TO USE THE SERVICE, EVEN IF APPLE HAS BEEN ADVISED OR IS AWARE OF THE POSSIBILITY OF SUCH DAMAGES AND REGARDLESS OF THE THEORY OF LIABILITY (CONTRACT, TORT, OR OTHERWISE), AND EVEN IF APPLE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT SHALL APPLE'S TOTAL LIABILITY TO YOU FOR ALL DAMAGES (OTHER THAN AS MAY BE REQUIRED BY APPLICABLE LAW IN CASES INVOLVING PERSONAL INJURY) EXCEED THE AMOUNT OF FIFTY DOLLARS ($50.00). THE FOREGOING LIMITATIONS WILL APPLY EVEN IF THE ABOVE STATED REMEDY FAILS OF ITS ESSENTIAL PURPOSE.

9. Data Privacy and Security

9.1 Personal Data Usage and Disclosure

Under this Agreement, Apple, acting as a data processor on Your behalf, may receive or have access to Personal Data, if provided by You or on Your behalf. By entering into this Agreement, You instruct Apple to process and use this Personal Data to provide and maintain the Service in accordance with applicable law, Your instructions given through the use of the Service (e.g., instructions given through the Service), and any other written instructions given by You that are accepted and acknowledged in writing by Apple, and Apple shall only process the Personal Data on such documented instructions, unless required to do so by law, in such case, Apple shall inform You of that legal requirement before processing, unless that law prohibits such information on important grounds of public interest. Apple may provide Personal Data to Sub-processors who provide services to Apple in connection with the Service. You authorize Apple to use all the Apple

entities set forth in the definition of "Apple" as Sub-processors and to use any other Sub-processors; provided such Sub-processors are contractually bound by data protection obligations at least as protective as those in this Agreement. The list of Sub-processors is available at https://www.apple.com/legal/enterprise/data-transfer-agreements/subprocessors_us.pdf. If a Sub-processor fails to fulfil its data protection obligations, Apple shall remain liable to You for the performance of that Sub-processor's obligations to the extent required by applicable law.

9.2 Data Incidents

If Apple becomes aware that Personal Data has been altered, deleted, or lost as a result of any unauthorized access to the Service (a "Data Incident"), Apple will notify Institution without undue delay if required by law, and Apple will take reasonable steps to minimize harm and secure the data. Notification of, or response to, a Data Incident by Apple will not be construed as an acknowledgment by Apple of any responsibility or liability with respect to a Data Incident. Institution is responsible for complying with applicable incident notification laws and fulfilling any third-party obligations related to Data Incident(s). Apple will not access the contents of Personal Data in order to identify information subject to any specific legal requirements.

9.3 Security Procedures; Compliance

Apple shall use industry-standard measures to safeguard Personal Data during the transfer, processing, and storage of Personal Data as part of the Service. As part of these measures, Apple will use commercially reasonable efforts to encrypt Personal Data at rest and in transit; ensure the ongoing confidentiality, integrity, availability and resilience of the Service; in the event of an issue, restore the availability of Personal Data in a timely manner; and regularly test, assess, and evaluate the effectiveness of such measures. Apple will take appropriate steps to ensure compliance with security procedures by its employees, contractors and Sub-processors, and Apple shall ensure that any persons authorized to process such Personal Data comply with applicable laws regarding the confidentiality and security of Personal Data with regards to the Service. Encrypted Personal Data may be stored at Apple's geographic discretion. To the extent Apple is acting as a data processor, Apple will assist You with ensuring Your compliance, if applicable, with the following: (a) Article 28 of the GDPR or other equivalent obligations under law (by making available all necessary information; by allowing for and contributing to audits (provided, that Apple's ISO 27001 and ISO 27018 certifications shall be considered sufficient for such required audit purposes) and by informing You, as required by applicable law, if, in Apple's opinion, any of Your instructions infringes the GDPR or other European Union or European Union Member State data protection provisions); (b) Article 32 of the GDPR or other equivalent obligations under law (including implementing the security procedures set forth in this Section 9.3 and by maintaining the ISO 27001 and ISO 27018 Certifications); (c) Articles 33 and 34 of the GDPR or other equivalent obligations under law (by assisting You with providing required notice of a Data Incident to a supervisory authority or data subjects); (d) Articles 35 and 36 of the GDPR or other equivalent obligations under law requiring Institution to conduct data protection impact assessments or to consult with a supervisory authority prior to processing; (e) an investigation by a data protection regulator or similar authority regarding Personal Data; and (f) Your obligation to respond to request for exercising data subject's rights under the GDPR or other equivalent obligations under law, taking into account the nature of the processing by appropriate technical and organizational measures, insofar as this is possible.

9.4 Data Access and Transfer; Termination; Institution as Processor

If required by law, Apple will ensure that any international data transfer is done only to a country that ensures an adequate level of protection, has provided appropriate safeguards as set forth in applicable law, such as those in Articles 46 and 47 of the GDPR (e.g., standard data protection clauses), or is subject to a derogation in Article 49 of the GDPR. Such safeguards may include the Model Contract Clauses as executed by Apple, or other data transfer agreements, which You agree to enter into if required by Your jurisdiction, as executed by Apple at https://www.apple.com/legal/enterprise/datatransfer/. Apple's international transfer of Personal

Data collected in participating Asia-Pacific Economic Cooperation (APEC) countries abides by the APEC Cross-Border Privacy Rules (CBPR) System and Privacy Recognition for Processors (PRP) System for the transfer of Personal Data. In case of questions or unresolved concerns about our APEC CBPR or PRP certifications, our third-party dispute resolution provider can be contacted. Apple is not responsible for data You store or transfer outside of Apple's system. Upon termination of this Agreement for any reason, Apple shall securely destroy Personal Data stored by Apple in connection with Your use of the Service within a reasonable period of time, except to prevent fraud or as otherwise required by law. To the extent that Institution enters into this Agreement as a data processor for a Permitted Entity, Institution represents and warrants that Institution is entering into this Agreement on behalf of itself, and, to the limited extent set forth herein, such Permitted Entity. Institution represents that it has the applicable consents from such Permitted Entity to enter into this Agreement and to engage Apple as a sub-processor on such entity's behalf, and is responsible to Apple for any claims from such Permitted Entities with respect thereto.

9.5 Access to Third Party Products and Services

If You choose to access, use, download, install, or enable third party products or services that operate with the Service but are not a part of the Service, then the Service may allow such products or services to access Personal Data as required for the use of those additional services. Certain of those third party products or services may also provide access to Personal Data to Apple, such as if You allow Your Authorized Users to sign into the Service through federated identity providers. You are not required to use such additional products or services in relation to the Service, and Your Administrator may restrict the use of such additional products or services in accordance with this Agreement. Prior to accessing, using, downloading, installing, or enabling third party products or services for use with a Managed Apple ID, You should review the terms, policies and practices of the third party products and services to understand what data they may collect from Your Authorized Users, how the data may be used, shared and stored, and, if applicable, whether such practices are consistent with any consents You have obtained.

9.6 Other

Apple may disclose Personal Data about You if Apple determines that disclosure is reasonably necessary to enforce Apple's terms and conditions or protect Apple's operations or users. Additionally, in the event of a reorganization, merger, or sale, Apple may transfer any and all Personal Data You provide to the relevant party. THIS DISCLOSURE DOES NOT APPLY TO THE DATA COLLECTION PRACTICES OF ANY CONTENT (INCLUDING THIRD-PARTY APPS). PRIOR TO PURCHASE OR DOWNLOAD OF CONTENT AS PART OF THE SERVICE, YOU SHOULD REVIEW THE TERMS, POLICIES, AND PRACTICES OF SUCH CONTENT. In the event Apple receives a third-party request for Personal Data ("Third-Party Request"), Apple will notify You, to the extent permitted by law, of its receipt of the Third-Party Request, and notify the requester to address such Third-Party Request to You. Unless otherwise required by law or the Third-Party Request, You will be responsible for responding to the Request.

10. General Legal Terms

10.1 Third-Party Notices

Portions of the Apple Software or the Service may utilize or include third-party software and other copyrighted material. Acknowledgements, licensing terms and disclaimers for such material are contained in the electronic documentation for the Service or applicable part thereof, and Your use of such material is governed by their respective terms.

10.2 Other Collection and Use of Data

Apple and its affiliates and agents may collect, maintain, process and use diagnostic, technical, usage and related information, including but not limited to unique system or hardware identifiers, cookies or IP addresses, information about Your and Your Authorized Users' use of the Service, Your MDM Server, Device Enrollment Settings, computers, devices, system and application

software, and other software and peripherals, that is gathered periodically to facilitate the provision of services to You related to the Service, to provide, test and improve Apple's devices and services, for internal purposes such as auditing, data analysis, and research to improve Apple's devices, services, and customer communications, to facilitate the provision of software or software updates, device support and other services to You (if any) related to the Service or any such software, for security and account management purposes, and to verify compliance with the terms of this Agreement. Data collected pursuant to this Section will be treated in accordance with Apple's Privacy Policy, which can be viewed at: http://www.apple.com/legal/privacy.

10.3 Assignment

This Agreement may not be assigned, nor may any of Your obligations under this Agreement be delegated, in whole or in part, by You by operation of law, merger, or any other means without Apple's express prior written consent and any attempted assignment without such consent will be null and void.

10.4 Press Releases and Other Publicity; Relationship of Parties

You may not issue any press releases or make any other public statements regarding this Agreement, its terms and conditions, or the relationship of the parties without Apple's express prior written approval, which may be withheld at Apple's discretion. This Agreement will not be construed as creating any agency relationship, or a partnership, joint venture, fiduciary duty, or any other form of legal association between You and Apple, and You will not represent to the contrary, whether expressly, by implication, appearance or otherwise. This Agreement is not for the benefit of any third parties.

10.5 Notices

Any notices relating to this Agreement shall be in writing. Notices will be deemed given by Apple when sent to You at the email address or mailing address You provided during the sign-up process. All notices to Apple relating to this Agreement will be deemed given (a) when delivered personally, (b) three business days after having been sent by commercial overnight carrier with written proof of delivery, and (c) five business days after having been sent by first class or certified mail, postage prepaid, to this Apple address: Apple Inc., Apple Developer Legal (Apple Business Manager), One Apple Park, 37-2ISM, Cupertino, California 95014 U.S.A. You consent to receive notices by email and agree that any such notices that Apple sends You electronically will satisfy any legal communication requirements. A party may change its email or mailing address by giving the other written notice as described above.

10.6 Severability

If a court of competent jurisdiction finds any clause of this Agreement to be unenforceable for any reason, that clause of this Agreement shall be enforced to the maximum extent permissible so as to affect the intent of the parties, and the remainder of this Agreement shall continue in full force and effect. However, if applicable law prohibits or restricts You from fully and specifically complying with the Sections of this Agreement entitled "Service Requirements", or "Institution's Obligations" or prevents the enforceability of any of those Sections, this Agreement will immediately terminate and You must immediately discontinue any use of the Service.

10.7 Waiver and Construction

Failure by Apple to enforce any provision of this Agreement shall not be deemed a waiver of future enforcement of that or any other provision. Any laws or regulations that provide that the language of a contract will be construed against the drafter will not apply to this Agreement. Section headings are for convenience only and are not to be considered in construing or interpreting this Agreement.

10.8 Export Control

You may not use, export, re-export, import, sell or transfer the Service or Apple Software, or any

part thereof, except as authorized by United States law, the laws of the jurisdiction in which You obtained the Service or Apple Software, and/or any other applicable laws and regulations. In particular, but without limitation, the Service and the Apple Software may not be exported or re-exported (a) into any U.S. embargoed countries or (b) to anyone on the U.S. Treasury Department's list of Specially Designated Nationals or the U.S. Department of Commerce's Denied Persons List or Entity List or any other restricted party lists. By using the Service or Apple Software, You represent and warrant that You are not located in any such country or on any such list. You also agree that You will not use the Service or Apple Software for any purposes prohibited by United States law, including, without limitation, the development, design, manufacture or production of nuclear, missile, chemical or biological weapons.

10.9 Government End-users

The Service, Apple Software, and Documentation are "Commercial Items", as that term is defined at 48 C.F.R. §2.101, consisting of "Commercial Computer Software" and "Commercial Computer Software Documentation", as such terms are used in 48 C.F.R. §12.212 or 48 C.F.R. §227.7202, as applicable. Consistent with 48 C.F.R. §12.212 or 48 C.F.R. §227.7202-1 through 227.7202-4, as applicable, the Commercial Computer Software and Commercial Computer Software Documentation are being licensed to U.S. Government end-users (a) only as Commercial Items and (b) with only those rights as are granted to all other end-users pursuant to the terms and conditions herein. Unpublished-rights reserved under the copyright laws of the United States.

10.10 Dispute Resolution; Governing Law

Any litigation or other dispute resolution between You and Apple arising out of or relating to this Agreement, the Apple Software, or Your relationship with Apple will take place in the Northern District of California, and You and Apple hereby consent to the personal jurisdiction of and exclusive venue in the state and federal courts within that District with respect any such litigation or dispute resolution. This Agreement will be governed by and construed in accordance with the laws of the United States and the State of California, except that body of California law concerning conflicts of law. Notwithstanding the foregoing:

(a) If You are an agency, instrumentality or department of the federal government of the United States, then this Agreement shall be governed in accordance with the laws of the United States of America, and in the absence of applicable federal law, the laws of the State of California will apply. Further, and notwithstanding anything to the contrary in this Agreement (including but not limited to Section 5 (Indemnification)), all claims, demands, complaints and disputes will be subject to the Contract Disputes Act (41 U.S.C. §§601-613), the Tucker Act (28 U.S.C. § 1346(a) and § 1491), or the Federal Tort Claims Act (28 U.S.C. §§ 1346(b), 2401-2402, 2671-2672, 2674-2680), as applicable, or other applicable governing authority. For the avoidance of doubt, if You are an agency, instrumentality, or department of the federal, state or local government of the U.S. or a U.S. public and accredited educational institution, then Your indemnification obligations are only applicable to the extent they would not cause You to violate any applicable law (e.g., the Anti-Deficiency Act), and You have any legally required authorization or authorizing statute;

(b) If You are a U.S. public and accredited educational institution or an agency, instrumentality, or department of a state or local government within the United States, then (i) this Agreement will be governed and construed in accordance with the laws of the state (within the U.S.) in which You are domiciled, except that body of state law concerning conflicts of law; and (ii) any litigation or other dispute resolution between You and Apple arising out of or relating to this Agreement, the Apple Software, or Your relationship with Apple will take place in federal court within the Northern District of California, and You and Apple hereby consent to the personal jurisdiction of and exclusive venue of such District unless such consent is expressly prohibited by the laws of the state in which You are domiciled;

(c) If You are an international, intergovernmental organization that has been conferred immunity from the jurisdiction of national courts through Your intergovernmental charter or agreement, then

any controversy or claim arising out of or relating to this Agreement, or the breach thereof, shall be determined by arbitration under the Rules of Arbitration of the International Chamber of Commerce (the "ICC Rules") in effect at the time of applying for arbitration by three arbitrators appointed in accordance with such rules, and will be conducted according to the International Bar Association (IBA) Rules on the Taking of Evidence in International Arbitration. The place of arbitration shall be London, England. The arbitration shall be conducted in English. Upon Apple's request, You agree to provide evidence of Your status as an intergovernmental organization with such privileges and immunities; and

(d) If You are domiciled in a European Union country, or in Iceland, Norway, Switzerland, or the United Kingdom, the governing law and forum shall be the laws and courts of the country of domicile of the Apple entity providing the Service, as applicable, as set forth in the definition of "Apple".

This Agreement shall not be governed by the United Nations Convention on Contracts for the International Sale of Goods, the application of which is expressly excluded.

10.11 Entire Agreement; Governing Language

This Agreement constitutes the entire agreement between the parties with respect to the Service contemplated hereunder and supersedes all prior understandings and agreements regarding its subject matter. For the avoidance of doubt, nothing in this Agreement supersedes the EULAs for the Apple Software. This Agreement may be modified only: (a) by a written amendment signed by both parties, or (b) to the extent expressly permitted by this Agreement (for example, by Apple by notice to You). Any translation of this Agreement is provided as a courtesy to You, and in the event of a dispute between the English and any non-English version, the English version of this Agreement shall govern, to the extent not prohibited by local law in Your jurisdiction. If You are located in the province of Quebec, Canada, or are a government organization within France, the following clause applies: The parties hereby confirm that they have requested that this Agreement and all related documents be drafted in English. *Les parties ont exigé que le présent contrat et tous les documents connexes soient rédigés en anglais.*

10.12 Acceptance

Institution acknowledges and agrees that by clicking on the "Agree" or similar button or by checking a box, Institution, through its authorized representative, is accepting and agreeing to the terms and conditions of this Agreement.

LYL111
3/31/2022

SAINT JOHN

COUNCIL REPORT

M&C No.	2022-128
Report Date	April 11, 2022
Meeting Date	April 19, 2022
Service Area	Utilities and Infrastructure Services

Her Worship Mayor Donna Noade Reardon and Members of Council

SUBJECT: Engineering Services: Market Place West – Phase III Revitalization

AUTHORIZATION

Primary Author	Commissioner/Dept. Head	City Manager
Cameron Whitcomb	***J. Brent McGovern / Michael Baker***	***John Collin***

RECOMMENDATION

It is recommended that the proposal from Glenn Group Landscape Architects and Park Planners, for architectural design, engineering services, and construction management services for the Market Place West Phase III Revitalization project in the amount of $80,822.00 including HST be accepted and that the Mayor and City Clerk be authorized to execute the appropriate documentation in that regard.

EXECUTIVE SUMMARY

The work at Market Place West includes the implementation of phase III of the Master plan. The work includes upgrading/renewal of the existing pathways, lighting, landscaping, and benching. The work also includes the addition of parking spaces. The purpose of this report is to recommend that Council award the contract for Engineering and Architectural Services for the design and construction management services for the Market Place West Phase III Revitalization Project to Glenn Group Landscape Architects and Park Planners.

PREVIOUS RESOLUTIONS

November 15, 2021: M&C 2021-303 – 2022 General Fund and Utility Fund Capital Budgets, approved.

November 29, 2021: M&C 2021-334 – Revised 2019-2023 Canada Community - Building Fund (Formerly the Gas Tax Fund) Capital Investment Plan & General Fund Capital Program – Revision I, approved.

REPORT

BACKGROUND

The approved 2022 General Fund Capital Program includes funding for design and construction management for the implementation of phase III of the Market Place West Master Plan. The design of the work will commence immediately following award of the Engineering and Architectural Services and execution of the subsequent Agreement.

A Request for Proposal (RFP) was advertised to engage an Engineering or Landscape Architect Firm to carry out the following services for the project and included the following components:

- Part A – Site Surveys, Preliminary Investigation and Data Collection
- Part B – Preliminary Design, Cost Estimates and Design Report
- Part C – Detailed Design
- Part D – Tender Period Services, Materials Testing & Inspection, Red Books and Record Drawings
- Part E – Construction Management

PURPOSE

The purpose of this report is to make a recommendation for consulting engineering and landscape architect services for this project.

ANALYSIS

With a comprehensive terms of reference document developed by staff, a public call for proposals was made for consulting engineering services. The Request for Proposal (RFP) closed on March 17, 2022, with one response received from the following landscape architecture company:

- Glenn Group Landscape Architects and Park Planners, Saint John, NB

A Review Committee consisting of staff from Supply Chain Management, Utilities and Infrastructure Services, and Parks and Recreation Services was formed to evaluate the submission.

Each member completed an independent review of the submission, and a meeting was held to discuss the details of the submission and if there were any scope items missing from the proposal. The Review Committee concluded on their recommendation, which follows later in the report.

The evaluation process uses the expertise of a variety of staff from Supply Chain Management, Engineering, and Parks and Recreation to ensure a thorough review of the submission. Care must be taken to ensure that the necessary level of effort

and expertise is being directed to the various tasks involved in the work, while still ensuring that costs to be incurred are appropriate and controllable. It is for these reasons that cost, although very important, cannot be the sole nor most critical deciding factor in making the selection of a consulting engineering or landscape architect firm.

The Committee was tasked with the role of reviewing the submission against the proposal evaluation criteria as defined in the proposal call document. The criteria consisted of the following:

1. ***Quality and Completeness*** – Does the proposal address all the needs raised? Is the proposal presented in an organized and professional manner?
2. ***Consultant's Experience*** – Has the consultant demonstrated a level of expertise with the requirements of this project?
3. ***Experience of Employees / Sub*-consultants** – Has the consultant demonstrated a level of expertise for the employees of the company and sub consultants listed?
4. ***Methodology*** – Does the approach to the project outlined in the proposal address, in a realistic sense, attainable goals and is it in keeping with the City's expectations for the project?
5. ***Value Added*** – Has the consultant included any additional information, technology, process, or options in their proposal?
6. ***Cost*** – Cost will be a factor, however not the only factor to be considered. Is the price quoted in line with the City's estimate for the work and has it allowed for each aspect of the project to be adequately addressed?

After careful, independent consideration of presentation, company experience, personnel and technical proposal, the Review Committee discussed the findings of each member. Since there was only one proposal submission, the technical and financial proposals were reviewed and evaluated together.

After due consideration, the Review Committee selected the submission from Glenn Group Landscape Architects and Park Planners as it met all the requirements of the proposal call, in a manner acceptable to the committee and with a cost-effective bid for the project.

POLICY – ENGAGEMENT OF ENGINEERING CONSULTANTS

The costs incurred by the consultant will be paid in accordance with the terms of the Request for Proposal at the rates submitted and accepted in the consultant's proposal not to exceed the Recommended Hourly Rates as contained in The Association of Consulting Engineering Companies – New Brunswick and The Atlantic Provinces Association of Landscape Architects fee guidelines. The Construction Management component of this project fee is based on an estimated

6-week overall construction period. The final fee will be calculated based on the actual construction management period.

STRATEGIC ALIGNMENT

This report aligns with Council's Priorities for **GROW**, **GREEN**, **BELONG, PERFORM** and **MOVE** as the project involves reconstructing a section of Market Place West that is currently in poor condition with other Share and City Share funding. The project will also extend Harbour Passage, accentuate Market Square's features, and promote a safe and secure environment for pedestrians and cyclists.

SERVICE AND FINANCIAL OUTCOMES

The proposed cost of work from Glenn Group Landscape Architects and Park Planners to provide engineering design/landscape architecture and construction management services for the Market Place West Phase III Revitalization is $80,822.00 including HST.

An amount of $391,597 of the Canada Community Building Fund funding and $43,403 of the General Fund funding is included in the 2022 General Fund Capital Program for engineering design/landscape architecture and construction management services, and construction for this project.

Engineering and landscape architecture fees to cover the costs of design and construction management generally do not exceed 15-20% of the total overall project cost, depending on the nature of the project and the services required. This upset fee is approximately 18.6% of the total estimated project cost, which is in line with the expected value of these services.

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

Supply Chain Management facilitated the RFP process to solicit proposals from Engineering and Landscape Architectural Consultants for the Market Place West Phase III Revitalization project. The committee was tasked with the role of reviewing the submission against the proposal evaluation criteria as defined in the proposal call document.

In accordance with the City's policies and procedures, separate assessments by the Review Committee members of the submission were undertaken. The above process is in accordance with the City's Procurement Policy and Supply Chain Management support the recommendation being put forth.

ATTACHMENTS

N/A

SAINT JOHN

COUNCIL REPORT

M&C No.	2022-119
Report Date	April 08, 2022
Meeting Date	April 19, 2022
Service Area	Utilities and Infrastructure Services

Her Worship Mayor Donna Noade Reardon and Members of Council

SUBJECT: 2022 Regional Digital Orthophotography Acquisition

AUTHORIZATION

Primary Author	Commissioner/Dept. Head	City Manager
Yves Leger	***J. Brent McGovern /Michael Baker***	***John Collin***

RECOMMENDATION

It is recommended that the proposal submitted by First Base Solutions, for the acquisition of 2022 digital orthophotography, in the amount of $87,002.79 plus HST be accepted.

EXECUTIVE SUMMARY

The purpose of this report is to seek Council's approval to award the 2022 Regional Digital Orthophotography Acquisition to First Base Solutions.

PREVIOUS RESOLUTION

2022 General Fund and Utility Fund operating budgets

REPORT

Orthophotos are aerial photographs in which the displacement of objects, due to normal photographic distortion, curvature of the earth and ground relief, has been eliminated. They are photos that show objects on the ground, in their correct geographic position.

In addition to giving users a better understanding of their geography, within the Geographic Information System (GIS), orthophotos provide a means for updating existing asset and infrastructure mapping information as well as mapping any new features. Since the distances and angles can be measured directly from orthophotos, the number of field visits required for each project are dramatically reduced or eliminated altogether.

Up-to-date, high resolution orthophotos are a critical tool that enables better mapping of assets and even condition assessment of some assets, such as roads

and sidewalks from the desktop. This significantly reduces the need for field visits and the time required to have the information in the asset management program in order to perform maintenance scheduling and capital planning.

The City of Saint John Geographic Information Systems service area has been coordinating and managing biennial digital orthophotography acquisition projects for the Greater Saint John area, including the surrounding municipalities of Grand Bay-Westfield, Rothesay, Quispamsis and Hampton, since 2004. This year's project covers an area of 679 square kilometers.

The primary reason for including the surrounding municipalities in the project is to realize an economy of scale, i.e., the greater the project area, the lower the per square kilometer cost for all partners. In addition to each partnering municipality paying for their own area, past practice has also been to sell the data to recover some of the costs.

STRATEGIC ALIGNMENT

The 2022 Digital Orthophotography Acquisition is well aligned with Council's "Perform" priority for Core Service Delivery, specifically as it relates to cost-sharing and working together in the region to efficiently deliver public service.

SERVICE AND FINANCIAL OUTCOMES

The total cost to perform the City's portion of this regional project, if awarded as recommended, will be $87,002,79 plus HST.

Funding for this project is provided in the Geographic Information Systems General Fund operating budget and Saint John Water's operating budget.

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

Supply Chain Management facilitated the publicly advertised proposal call. Request for Proposal (RFP) no. 2022-081301P was issued on February 14, 2022 and closed on March 10, 2022 with the following 4 companies responding by submitting proposals:

COMPANY NAME	LOCATION
EagleView	Ontario
First Base Solutions	Ontario
PHB Inc.	Quebec
XEOS Imaging Inc.	Quebec

A review committee, consisting of staff from Supply Chain Management and Geographic Information Systems as well as representatives from the towns of Rothesay, Quispamsis and Hampton reviewed the submissions for completeness

and compliance with the RFP requirements and selection criteria consisting of the following:

1. Completeness of the Proposal
2. Technical Approach (Methodology and Equipment)
3. Management Approach
4. Experience of Personnel Assigned to the Project
5. Experience of the Firm in Comparable Projects
6. Production and Delivery Schedule
7. Value-Added

Once the technical evaluations of the proposals had been completed, the financial proposals were opened and evaluated.

After final scores were calculated, the committee unanimously ranked First Base Solutions highest, as they met all the requirements set forth in the RFP and received the highest evaluation score.

The above process is in accordance with the City's Procurement Policy and Supply Chain Management support the recommendation being put forth.

ATTACHMENTS

N/A

SAINT JOHN

COUNCIL REPORT

M&C No.	2022-116
Report Date	April 12, 2022
Meeting Date	April 19, 2022
Service Area	Utilities and Infrastructure Services

Her Worship Mayor Donna Noade Reardon and Members of Council

SUBJECT: Contract No. 2022-10 Asphalt Resurfacing 2022

AUTHORIZATION

Primary Author	Commissioner/Dept. Head	City Manager
Rod Mahaney	***Brent McGovern/Michael Hugenholtz/Michael Baker***	***John Collin***

RECOMMENDATION

It is recommended that Contract No. 2022-10: Asphalt Resurfacing 2022 be awarded to the low Tenderer, Galbraith Construction Ltd., at the tendered price of $7,010,536.33 (including HST) as calculated based upon estimated quantities, and further that the Mayor and City Clerk be authorized to execute the necessary contract documents.

EXECUTIVE SUMMARY

The purpose of this report is to recommend that Council award Contract 2022-10: Asphalt Resurfacing 2022 to the low Tenderer.

PREVIOUS RESOLUTIONS

M&C 2021-303 - November 15, 2021; – General Fund and Utility Fund Capital Budgets, approved.
M&C 2021-334 – November 29, 2021; Revised 2019-2023 Canada Community – Building Fund (Formerly the Gas Tax Fund) Capital Investment Plan & General Fund Capital Program – Revision 1, approved.
M&C 2021-349 – December 13, 2021; General Fund Operating Budget, approved.

REPORT

BACKGROUND

The 2022 General Fund Operating Budget for Public Works and Transportation Services and the 2022 General Fund Capital Program include provisions for the resurfacing of a number of streets in the City. This is an annual program to

upgrade and maintain deteriorating street surfaces under the maintenance and capital resurfacing programs.

This contract includes all work associated with the resurfacing of a total of 28 streets or segments of streets which equates to 43.7 lane kilometers. This work consists generally of the supply of all necessary labour, materials and equipment for the placement of approximately 23,110 tonnes of Superpave hot-mix asphalt. Also included in this contract is the installation of approximately 11,715 lineal metres of concrete curb and 1,960 lineal metres of sidewalk.

TENDER RESULTS

Tenders closed on April 5, 2022, with the following results, including HST:

1. Galbraith Construction Ltd., Saint John, NB $7,010,536.33
2. NRB Construction Company Ltd, Saint John, NB $8,014,404.05
3. Debly Enterprises Ltd., Saint John, NB $8,607,472.56

The Engineer's estimate for the work was $6,622,600 including HST.

ANALYSIS

The tenders were reviewed by staff and were found to be formal in all respects with the exception of the following submissions. The tenders from Debly Enterprises Ltd. and Galbraith Construction Ltd. contained a minor error in mathematics that required correction in accordance with specification article 2.11 u) (ii).

The variance between the Engineers Estimate and the low tendered price can mainly be attributed to the higher than anticipated unit price for the supply and placement of asphalt concrete. When comparing the 2021 tendered unit price for the placement of asphalt with the 2022 tendered unit price the cost to the city has increased by approximately 48%. Other unit prices in the 2022 tenders for items incidental to paving have also seen some significant price increases.

Staff is of the opinion that the low tenderer has the necessary resources and expertise to perform the work and recommend acceptance of their tender. The asphalt production and placement processes will be closely monitored to ensure conformance with project specifications. Work is expected to begin the first week of May and continue until October 15, 2022.

FINANCIAL IMPLICATIONS

The Contract includes work that is funded by various Operating and Capital Budgets. Assuming award of the Contract to the low tenderer, an analysis has

been completed which includes the estimated amount of work that will be performed by the Contractor and Others.

The analysis is as follows:

Budget	$ 6,594,115
Project net cost	$ 6,962,460
Variance (Shortfall)	$ 368,345

The contract includes a $690,000 contingency allowance for unforeseen additional work requested by the Engineer to be carried out by the contractor to ensure a complete project. Staff will monitor project quantities and contingency items throughout the project and make any necessary adjustments to scope of work to ensure the project is completed within the approved budget envelope.

STRATEGIC ALIGNMENT

This report aligns with City's Priorities of **GROW** by investing in key infrastructure upgrades and **PERFORM** by adhering to plans, policies, procedures, and best practices with respect to managing the City's roadway assets.

SERVICE AND FINANCIAL OUTCOMES

Asphalt pavements, and concrete curb and sidewalks are essential infrastructure which directly impacts the quality of life in our community. Roadway infrastructure is important to the economic health of the community and citizens expect these assets to be maintained to an acceptable standard. Proper and timely maintenance of all roadway assets will ensure public safety, extend service life of the asset, and achieve best value for the investment. This project will be completed within the original approved financial budget.

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

N/A

ATTACHMENT

Asphalt Resurfacing List (As Tendered) - Streets to be resurfaced are subject to change based on Staff ensuring the project is completed within the approved budget envelope.

Asphalt Resurfacing 2022 - 10

Street	Limits		Comments
	From	To	
Belgian Road	Glen Road	Dead End	Curb renewal on both sides, sidewalk on south side only.
Bridge Road	Simms Corner	Reversing Falls Bridge	Includes Simms Corner Intersection.
Brookview Crescent	Mollins Drive	Greendale Crescent	Curb renewal on both sides.
Centre Street	Fundy Drive	Dead End	
Creighton Avenue	York Street	Champlain Dive	Curb renewal on both sides.
Dedication Street	Industrial Drive	Expansion Avenue	Curb renewal on both sides.
Golden Grove Road	McAllister Drive	Essex Street	Curb renewal both sides from Dresden to Essex, Sidewalk south side only.
Grandview Avenue	Bayside Drive	Cromwell Drive	
Hilyard Street	Chesley Drive	Paradise Row	
Industrial Drive	Grandview Avenue	Dedication Street	Curb renewal on both sides.
Keith Court	Champlain Drive	Champlain Drive	Curb renewal on both sides.
Knox Court	Champlain Drive	Champlain Drive	Curb renewal on both sides.
Milford Road (1)	Greenhead Road	Civic # 472	
Milford Road (2)	Civic # 412	Williams Street	
Milford Road (3)	Civic # 136	Civic # 63	Curb renewal on both sides, sidewalk north side only.
Morgan Road	Glen Road	Dead End	Curb renewal on both sides, sidewalk on south side only.
Muriel Avenue	Rosedale Crescent	Creighton Avenue	Curb renewal on both sides.
O'Brien Street	Manawagonish Road	Fairville Boulevard	
Parks Street Extension	Park Street	Parkwood Avenue	
Pleasant Street	Sea Street	Centre Street	
Roderick Row	Manchester Avenue	Dever Road	Curb renewal on both sides, sidewalk on east side only.
Rosedale Crescent	Champlain Drive	Creighton Avenue	Curb renewal on both sides.
Sandy Point Road	Tucker Park Road	Foster Thurston Drive	
Sea Street	Whipple Street	Railway Track	
Somerset Street	Churchill Boulevard	Civic # 560	
Summer Street West	Sea Street	Dead End	
Union Street	Charlotte Street	Saint Patrick Street	
Westfield Road	Civic # 2200	Civic # 2400	

SAINT JOHN

COUNCIL REPORT

M&C No.	2022-125
Report Date	April 11, 2022
Meeting Date	April 19, 2022
Service Area	Public Works and Transportation Services

Her Worship Mayor Donna Noade Reardon and Members of Common Council

SUBJECT: **Designation of By-Law Enforcement Officer- Jason Romhild**

AUTHORIZATION

Primary Author(s)	Commissioner/Dept. Head	City Manager
Jill Good	***Michael Hugenholtz/Marc Dionne***	***John Collin***

RECOMMENDATION

It is recommended that Common Council adopt the attached resolution appointing Jason Romhild as by-law enforcement officer for the *Saint John Parking By-law* and *Saint John Traffic By-law*.

EXECUTIVE SUMMARY

The purpose of this report is to designate Jason Romhild, Badge No. 9991 Canadian Corps of Commissionaires, as a by-Law enforcement officer, for the *Saint John Parking By-law* and *Saint John Traffic By-law* which are administered by the Parking department.

In doing so, Jason Romhild will be authorized to:

- Administer and enforce the *Saint John Parking By-Law*.
- Administer and enforce the *Saint John Traffic By-Law*.

PREVIOUS RESOLUTION

Not applicable.

REPORT

It is necessary at this time to designate Jason Romhild, a newly hired parking enforcement officer, as a by-Law enforcement officer, by adopting the attached resolution so that he may carry out his duties pertaining to enforcement of the *Saint John Parking By-law* and *Saint John Traffic By-law*.

PREVIOUS RESOLUTION

N/A

STRATEGIC ALIGNMENT

This report aligns with Council's "Growth" and "Belong" Priorities.

SERVICE AND FINANCIAL OUTCOMES

N/A

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

The General Counsel's Office has reviewed the attached resolution.

ATTACHMENTS

Resolution appointing Jason Romhild as by-law enforcement officer.

RESOLVED, that as recommended by the City Manager, the following resolution be adopted:

1. WHEREAS the Common Council of The City of Saint John has enacted certain by-laws pursuant to the authority of the *Local Governance Act*, S.N.B. 2017 c.18, and amendments thereto (the "*Local Governance Act*"), including *A By-law Respecting the Regulation of Parking in The City of Saint John*, By-law Number LG-8 (the "*Saint John Parking By-Law*"), *A By-law Respecting the Traffic on Streets in The City of Saint John*, By-law Number MV-10.1 (the "*Saint John Traffic By-Law*") and all amendments thereto;

   AND WHEREAS section 72 of the *Local Governance Act* provides that a council may appoint by-law enforcement officers for the local government and may determine their terms of office;

   NOW THEREFORE BE IT RESOLVED, that Jason Romhild is hereby appointed as by-law enforcement officer with respect to the enforcement of the *Saint John Parking By-Law* and *Saint John Traffic By-Law,* effective immediately, and this appointment shall continue until they cease to be an employee of the Parking department of The City of Saint John or until it is rescinded by Common Council, whichever comes first;

SAINT JOHN

COMMON COUNCIL REPORT

M&C No.	2022-120
Report Date	April 08, 2022
Meeting Date	April 19, 2022
Service Area	Growth and Community Services

Her Worship Mayor Donna Noade Reardon and Members of Common Council

SUBJECT: Common Council Report - M and C 22 120 - Designation of By-law Enforcement Officers.docx

AUTHORIZATION

Primary Author	Commissioner/Dept. Head	City Manager
Barb Crawford	***Jacqueline Hamilton / Amy Poffenroth***	***John Collin***

RECOMMENDATION

It is recommended that Common Council adopt the attached resolution appointing Barbara Crawford, Jocelyne Leblanc and P. Joel Landers as by-law enforcement officers for *A By-law Respecting Weight Restrictions within The City of Saint John*, By-law Number LG-17.

EXECUTIVE SUMMARY

The purpose of this report is to designate Barbara Crawford, Jocelyne Leblanc and P. Joel Landers as by-law enforcement officers for the *Weight Restrictions By-law* for the purpose of issuing Special Move Permits as administered by the Growth and Community Services department.

In doing so, they will be authorized to:

- Administer and enforce the *Weight Restrictions By-law* within the scope of the *Local Governance Act* and the *Motor Vehicle Act*; and

- Lay informations in Provincial Court with respect to the enforcement of the *Weight Restrictions By-law* that fall within the scope of the *Local Governance Act* and the *Motor Vehicle Act*.

PREVIOUS RESOLUTION

March 21, 2022, the following resolution was passed:

RESOLVED that the bylaw entitled “By-law Number L.G.-17 A By-law Respecting Weight Restrictions within The City of Saint John,” repealing and replacing the bylaw entitled “A By-Law Respecting Weight Restrictions Within The City of Saint

John", By-law Number MV-17, and all amendments thereto" to include a streamline permit process, be read a third time, enacted and the Corporate Common Seal affixed thereto. MOTION CARRIED.

Read a third time by title, the bylaw entitled, "By-law Number L.G.-17 A By-Law Respecting Weight Restrictions within the City of Saint John."

REPORT

In March 2022, a new By-law was brought before Common Council to include a permitting process that would authorize a heavy vehicle to travel on City Streets subject to the 80% axle mass limits.

It is necessary at this time to designate Barbara Crawford, Jocelyne Leblanc and P. Joel Landers as by-law enforcement officers by adopting the attached resolution so that they may carry out their duties pertaining to enforcement of the *Weight Restrictions By-law*.

STRATEGIC ALIGNMENT

This report best aligns with the Common Council priorities "GROW" and "BELONG".

SERVICE AND FINANCIAL OUTCOMES

Not Applicable.

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

The General Counsel's Office has reviewed the attached resolution.

ATTACHMENTS

Resolution appointing Barbara Crawford, Jocelyne Leblanc and P. Joel Landers as by-law enforcement officers.

RESOLVED, that as recommended by the City Manager, the following resolution be adopted:

1. WHEREAS the Common Council of The City of Saint John has enacted certain by-laws pursuant to the authority of the *Local Governance Act*, S.N.B. 2017 c.18, and amendments thereto (the "*Local Governance Act*"), including *A By-law Respecting Weight Restrictions within the City of Saint John*, By-law Number LG-17 (the "*Weight Restrictions By-law*") and all amendments thereto, and it may from time to time be necessary to commence proceedings in the Provincial Court of the Province of New Brunswick, when a person has violated or failed to comply with said By-law;

   AND WHEREAS section 72 of the *Local Governance Act* provides that a council may appoint by-law enforcement officers for the local government and may determine their terms of office;

   AND WHEREAS subsection 150(1) of the *Local Governance Act* provides that proceedings for breach of a by-law shall be commenced in the name of the clerk of the local government or such other person as is designated for that purpose by the council;

      NOW THEREFORE BE IT RESOLVED, that Barbara Crawford, Jocelyne Leblanc and P. Joel Landers are hereby appointed as by-law enforcement officers with respect to the enforcement of the *Weight Restrictions By-law,* effective immediately, and this appointment shall continue until they cease to be employees of the Growth and Community Services department of The City of Saint John or until it is rescinded by Common Council, whichever comes first;

      AND BE IT FURTHER RESOLVED, that Barbara Crawford, Jocelyne Leblanc and P. Joel Landers are hereby designated and authorized to lay informations in the Provincial Court of the Province of New Brunswick for breach of the *Weight Restrictions By-law*, effective immediately, and this designation and authorization shall continue until they cease to be employees of the Growth and Community Services department of The City of Saint John or until it is rescinded by Common Council, whichever comes first.

SAINT JOHN

COUNCIL REPORT

M&C No.	2022-103
Report Date	March 21, 2022
Meeting Date	April 18, 2022
Service Area	Public Works and Transportation Services

Her Worship Mayor Donna Noade Reardon and Members of Common Council

SUBJECT: **Amending Agreement to Lease 398 with the Saint John Port Authority**

OPEN OR CLOSED SESSION

This matter is to be discussed in open session of Common Council.

AUTHORIZATION

Primary Author(s)	Commissioner/Dept. Head	City Manager
Jill Good	***Michael Hugenholtz/Marc Dionne***	***John Collin***

RECOMMENDATION

RESOLVED that the City enter into an Amending Agreement to Lease 398 with the Saint John Port Authority in the form attached to M&C No. 2022-103; and that the Mayor and City Clerk be authorized to execute said Amending Agreement and any documents ancillary thereto.

EXECUTIVE SUMMARY

The City of Saint John Parking department manages two parking garages and fifteen (15) surface parking lots through eighteen (18) revenue share agreements, located throughout the South Central Peninsula. Eleven (11) of these parking lots are owned by third parties. Lots that are owned by a third party have a revenue share agreement/contract in place, and the net income is divided between the property owner and the City, based on the terms set forth in the contract.

Typically, as these lease agreements expire, they are either terminated or renegotiated. This particular report will focus solely on the details of the revenue share agreement that is between the Saint John Port Authority and the City of Saint John.

PREVIOUS RESOLUTION

Not applicable.

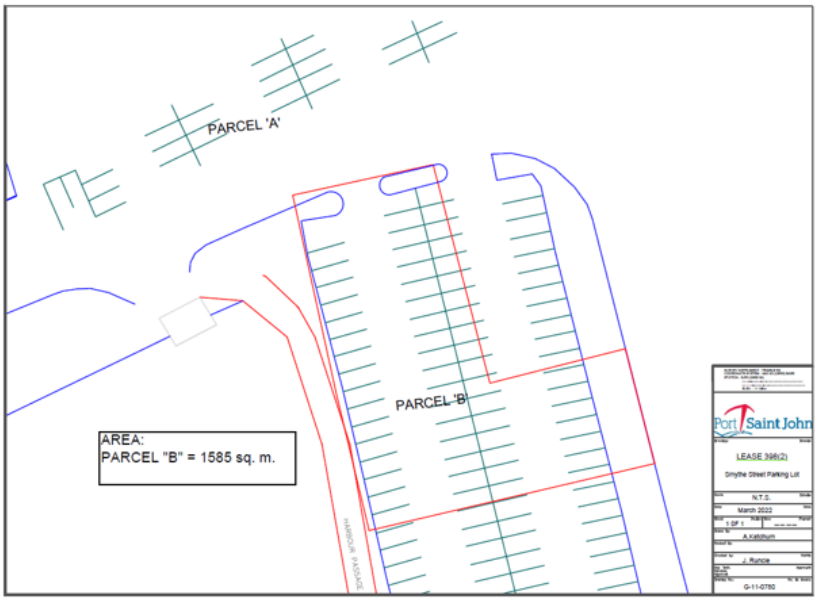
REPORT

On October 2nd, 2021, the City of Saint John dissolved the Saint John Parking Commission and subsequently assumed the responsibility for all previous contracts, managed by the Saint John Parking Commission. The City of Saint John Parking manages two parking garages and fifteen (15) surface parking lots through eighteen (18) revenue share agreements, located throughout the South Central Peninsula.

Eleven (11) of these parking lots are owned by third parties. Lots that are owned by a third party have a revenue share agreement/contract in place, and the net income is divided between the property owner and the City, based on the terms set forth in the contract.

In 2010, the former Parking Commission entered into a three (3) year contract with the Saint John Port Authority to manage parking at both the CNR lot and Smythe Street lot (known as Parcel A & B in Lease 398). Over the last several years that contract has been extended and is now set to expire December 31, 2022.

Due to the low number of rented spaces in this area, the removal of this parcel of land from the lease agreement will have a net positive financial impact to the City. The Parking department discussed with SJ Port Authority and have agreed to amend the details of the existing agreement referred to as Lease 398 in Appendix A, to remove the CNR lot portion (Parcel A) of the agreement and continue to manage the Smythe Street lot (Parcel B outlined in red). In the Fall, Parking and the Saint John Port Authority will discuss the details for a new lease for commencement in 2023.



A 30-day notice of the CNR lot closure was given to the monthly parkers on April 1st. They were offered the option to move to the Smythe Street lot (Parcel B) located immediately adjacent, that is also managed by the City on behalf of Saint John Port Authority.

PREVIOUS RESOLUTION

Not applicable.

STRATEGIC ALIGNMENT

This report aligns with Council's Priority to perform by leveraging viable opportunities to generate alternate/new sources of revenue.

SERVICE AND FINANCIAL OUTCOMES

The Parking department continues to successfully work with third party organizations through revenue share agreements to leverage opportunities within and for the City.

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

General Counsel Office has reviewed and provided feedback on the attached Amending Agreement and the report.

ATTACHMENTS

Appendix – A 2022 Amending Agreement to Lease 398

AMENDING AGREEMENT

This agreement (the "Amending Agreement") made the ___ day of _____, 2022,

BETWEEN: **SAINT JOHN PORT AUTHORITY** (hereinafter called the "Port")

AND **The City of Saint John,** a corporation having an office at Saint John, New Brunswick, (the "Lessee"),

WHEREAS;

1. By a lease known as Lease No. 398 (2) entered into in 2010, the Saint John Port Authority leased to the Lessee certain premises more particularly described therein for a term commencing May 1, 2009 and terminating on April 30, 2012 (the "Lease");
2. By a Lease Extension Agreement known as Lease No. 398 (3) entered into in 2014, the Saint John Port Authority leased to the Lessee certain premises more particularly described therein for a term commencing January 1, 2015 and terminating on December 31, 2019;
3. By a Lease Extension Agreement known as Lease No. 398 (4) entered into in 2020, the Saint John Port Authority leased to the Lessee certain premises more particularly described therein for a term commencing January 1, 2020 and terminating on December 31, 2022;
4. By an Assignment and Assumption Agreement entered into on the 1st day of October, 2021, the Saint John Parking Commission assigned all leases, licences and agreements for parking spaces to the Lessee; and
5. The Port and the Lessee have agreed to amend the Lease on the terms and conditions set out in this Amending Agreement.

NOW THEREFORE for good and valuable consideration, the receipt and sufficiency of which being hereby mutually acknowledged, the parties hereto covenant and agree with each other as follows:

1. Part I Demised Premises in Schedule "A" of the Lease is hereby deleted in its entirety and replaced with the following:

"**PART I DEMISED PREMISES**

The demised premises are situated at the Port of Saint John, New Brunswick, and is comprised of approximately 1,585 square metres as shown on the attached plan G-11-0780. For clarity, Parcel A will no longer be leased to the Lessee."

2. This Amending Agreement shall be read together with the Lease and the Port and Lessee agree, except as modified herein, all covenants and conditions in the Lease remain unchanged, unmodified, and in full force and effect.

IN WITNESS WHEREOF the parties hereto have caused these presents to be executed the day and year first above written.

SIGNED, SEALED AND DELIVERED

SAINT JOHN PORT AUTHORITY

_____
Senior Vice President Business Strategy and Innovation

Date:

SIGNED, SEALED AND DELIVERED

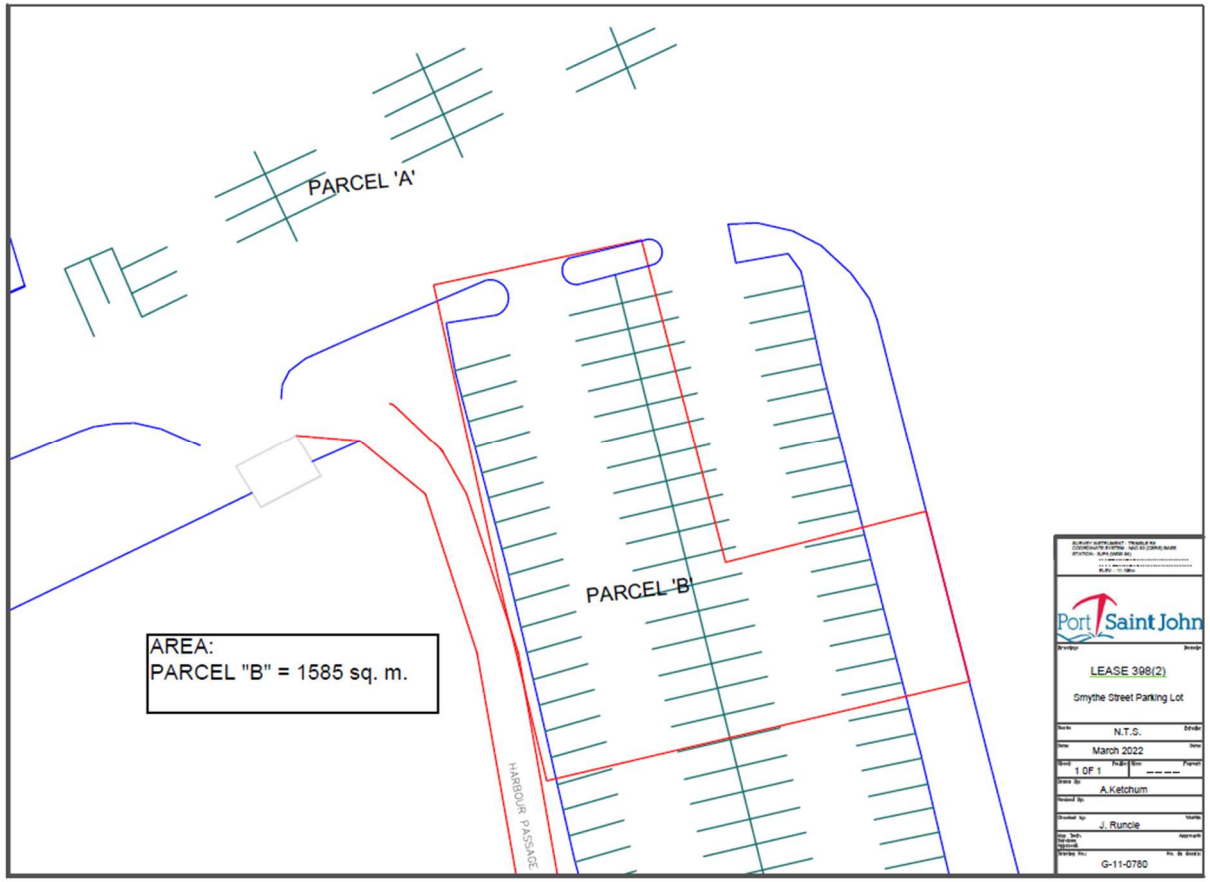
THE CITY OF SAINT JOHN

_____
Donna Noade Reardon, Mayor

_____
Jonathan Taylor, City Clerk

Common Council Resolution:
_____, 2022

Plan G-11-0780



SAINT JOHN

COUNCIL REPORT

M&C No.	2022-096
Report Date	April 12, 2022
Meeting Date	April 19, 2022
Service Area	Utilities and Infrastructure Services

Her Worship Mayor Donna Noade Reardon and Members of Council

SUBJECT: Engineering Services: Menzies Lake Dams and Access Road Drainage Upgrades

AUTHORIZATION

Primary Author	Commissioner/Dept. Head	City Manager
Dean Price	***J. Brent McGovern / Michael Baker***	***John Collin***

RECOMMENDATION

It is recommended that the proposal from GEMTEC Consulting Engineers and Scientists Limited, for engineering design and construction management services for the Menzies Lake Dams and Access Road Drainage Upgrades in the amount of $246,836.00 including HST be accepted and that the Mayor and City Clerk be authorized to execute the appropriate documentation in that regard.

EXECUTIVE SUMMARY

The work at Menzies Lake includes upgrading/installation of roadway culverts, three earthen dams, and improvements to the flow control structure. The purpose of this report is to recommend that Council award the contract for Engineering Services for the design and construction management services for the Menzies Lake Dams and Access Road Drainage Upgrades project to GEMTEC Consulting Engineers and Scientists Limited.

PREVIOUS RESOLUTIONS

November 15, 2021: M&C 2021-303 – 2022 General Fund and Utility Fund Capital Budgets, approved.

REPORT

BACKGROUND

The approved 2022 Water & Sewerage Utility Fund Capital Program includes funding for design and construction management, and the construction of Menzies Lake Dams and Access Road Drainage Upgrades. The design of the work will commence immediately following award of the Engineering Services and execution of the subsequent Agreement.

A Request for Proposal (RFP) was advertised to engage an Engineering Firm to carry out the following services for the project and included the following components:

- Part A – Site Surveys, Preliminary Investigation and Data Collection
- Part B – Preliminary Design, Cost Estimates and Design Report
- Part C – Conduct Public Consultation Process
- Part D – Detailed Design
- Part E – Tender Period Services, Materials Testing & Inspection, Red Books and Record Drawings
- Part F – Construction Management

PURPOSE

The purpose of this report is to make a recommendation for consulting engineering services for this project.

ANALYSIS

With a comprehensive terms of reference document developed by staff, a public call for proposals was made for consulting engineering services. The Request for Proposal (RFP) closed on March 17, 2022, with responses received from the following engineering companies:

- GEMTEC Consulting Engineers and Scientists Limited, Saint John, NB
- Brunswick Engineering & Consulting Inc., Saint John, NB

A Review Committee consisting of staff from Supply Chain Management and Utilities and Infrastructure Services was formed to evaluate the submissions.

Each member completed an independent review of the submissions, and a meeting was held to discuss the details of the submissions and if there were any scope items missing from the proposal. The Review Committee came to a conclusion on their recommendation, which follows later in the report.

The evaluation process uses the expertise of a variety of staff from Supply Chain Management and Utilities and Infrastructure (Engineering & Operations) to

ensure a thorough review of the submissions. Care must be taken to ensure that the necessary level of effort and expertise is being directed to the various tasks involved in the work, while still ensuring that costs to be incurred are appropriate and controllable. It is for these reasons that cost, although very important, cannot be the sole nor most critical deciding factor in making the selection of a consulting engineering firm.

The Committee was tasked with the role of reviewing the submissions against the proposal evaluation criteria as defined in the proposal call document. The criteria consisted of the following:

1. ***Quality and Completeness*** – Does the proposal address all the needs raised? Is the proposal presented in an organized and professional manner?
2. ***Consultant's Experience*** – Has the consultant demonstrated a level of expertise with the requirements of this project?
3. ***Experience of Employees / Sub*-consultants** – Has the consultant demonstrated a level of expertise for the employees of the company and sub consultants listed?
4. ***Methodology*** – Does the approach to the project outlined in the proposal address, in a realistic sense, attainable goals and is it in keeping with the City's expectations for the project?
5. ***Value Added*** – Has the consultant included any additional information, technology, process, or options in their proposal?
6. ***Cost*** – Cost will be a factor, however not the only factor to be considered. Is the price quoted in line with the City's estimate for the work and has it allowed for each aspect of the project to be adequately addressed?

After careful, independent consideration of presentation, company experience, personnel and technical proposal, the Review Committee compiled and discussed the findings of each member. After completion of the "technical" evaluation, the financial proposals were opened and evaluated. The financial proposals were submitted separately and were not part of the technical review.

After due consideration, the Review Committee selected the submission from GEMTEC Consulting Engineers and Scientists Limited as the best proposal based on an overall rating of the evaluation criteria - presentation, company experience, personnel, technical proposal, value added and cost. The submission from GEMTEC Consulting Engineers and Scientists Limited met all the requirements of the proposal call, in a manner acceptable to the committee and with a cost-effective bid for the project.

POLICY – ENGAGEMENT OF ENGINEERING CONSULTANTS

The costs incurred by the consultant will be paid in accordance with the terms of the Request for Proposal at the rates submitted and accepted in the consultant's proposal not to exceed the Recommended Hourly Rates as contained in The Association of Consulting Engineering Companies – New Brunswick. The Construction Management component of this project fee is based on an estimated 8-week overall construction period. The final fee will be calculated based on the actual construction management period.

STRATEGIC ALIGNMENT

This report aligns with Council's Priorities for GREEN and PERFORM as the project involves reconstructing sections of the dams and roadway that are currently in poor condition. The critical water system dams and roadway culverts will be improved to withstand more severe storms which is a key ingredient of climate change adaptation. The project will also improve access to the Musquash Pumping Station by reducing the washouts in the road after severe rain.

SERVICE AND FINANCIAL OUTCOMES

The proposed cost of work from GEMTEC Consulting Engineers and Scientists Limited to provide engineering design and construction management services for the Menzies Lake Dams and Access Road Drainage Upgrades project is $246,836.00 including HST.

An amount of $650,000 in Industrial funding (funded entirely by industrial users) is included in the 2022 Water and Sewerage Utility Fund Capital Program for engineering design and construction management services, and construction for this project.

Engineering fees to cover the costs of design and construction management generally do not exceed 15-20% of the total overall project cost, depending on the nature of the project and the engineering services required. GEMTEC Consulting Engineers and Scientists Limited's upset fee is approximately 38% of the total estimated project cost, which is in line with the expected value for projects that include these unique services. The expected engineering fees compared to typical municipal projects are a higher percentage of the project total costs. The reasons for the higher percentage of project total costs are the following: existing three dams plus control structure require a complete Dam Safety Analysis with extensive engineering calculations before the design of the refurbishment can begin which equates to approximately $70,000 in additional engineering fees; and the value of construction of the refurbishment is mostly the placement of engineered fill and new top surfacing of the dams such as rocks and vegetation which is relatively inexpensive compared to reconstructing existing urban roadways and underground systems. If the $70,000 cost associated with

completing a Dam Safety Analysis is removed it reduces the engineering fees from 38% to 27.2 % and when considering the other factors relating to dam work, this brings the expense in-line with anticipated engineering fees. Based on the above details staff believe the engineering fees are appropriate for this type of project.

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

Supply Chain Management facilitated the RFP process to solicit proposals from Engineering Consultants for the Menzies Lake Dams and Access Road Drainage Upgrades project. The committee was tasked with the role of reviewing the submission against the proposal evaluation criteria as defined in the proposal call document.

In accordance with the City's policies and procedures, separate assessments by the Review Committee members of the submissions were undertaken. The above process is in accordance with the City's Procurement Policy and Supply Chain Management support the recommendation being put forth.

ATTACHMENTS

N/A

SAINT JOHN

COUNCIL REPORT

M&C No.	2022-127
Report Date	April 12, 2022
Meeting Date	April 19, 2022
Service Area	Utilities and Infrastructure Services

Her Worship Mayor Donna Noade Reardon and Members of Council

SUBJECT: REQUEST FOR PROPOSALS 2022-621001P - Public Space at Market Slip & Harbour Passage Extension - Pedestrian Level Light Fixtures

AUTHORIZATION

Primary Author	Commissioner/Dept. Head	City Manager
J. Brent McGovern	***J. Brent McGovern***	***John Collin***

RECOMMENDATION

It is recommended that:

1) the proposal from Schréder Inc. to supply 58 pedestrian level lighting fixtures in variety of styles in the amount of $453,445.00 plus HST be accepted;
2) that Supply Chain Management be authorized to purchase the pedestrian level lighting fixtures; and
3) that the Mayor and City Clerk be authorized to execute any necessary contract documents.

EXECUTIVE SUMMARY

The purpose of this report is to recommend that Council award the contract for supply and delivery of pedestrian level lighting fixtures for the Fundy Quay Public Space projects to Schréder Inc.

PREVIOUS RESOLUTIONS

February 22, 2021; (M&C 2021-05) Approved Utility and General Fund – Revised 2021 Capital Programs

February 22, 2021: (M&C 2021-045) Approved Architectural Services: Loyalist Plaza & Fundy Quay Harbour Passage Extension.

December 20, 2021: (M&C 2021-366) Approved Contract 2021-083001T: Public Space at Market Slip – Site Demolition.

REPORT

BACKGROUND

The approved 2022 General Fund Capital Program includes funding for the Fundy Quay public space improvements at the Market Slip and the extension of Harbour Passage along the perimeter of the Fundy Quay Site.

Traditionally, the City would issue a preselection Request for Proposal (RFP) to select the most appropriate materials for a construction project such as the Fundy Quay public space projects. The preselection RFPs are based on the City's Purchasing Policy and the designer would include the successful supplier's materials in the construction specifications. Contractors bidding on the project are directed to purchase the preselected materials from the successful supplier. However, due to supply chain issues, waiting to procure certain materials through a contractor has the potential to result in cost increases and significant construction delays. Upon becoming aware of this risk, the project team concluded it was prudent to prepurchase specific materials for the Fundy Quay project as early as possible. The pedestrian level lighting fixtures are one of seven items being acquired through an advanced procurement strategy and will be supplied to the Contractor for installation under a separate contract which is planned to be tendered in May 2022.

A Request for Proposals (RFP) was developed for pedestrian level lighting fixture supply which detailed the minimum performance requirements for the lighting fixtures to meet for the project and included the following components:

- Part 1 – Introduction
- Part 2 – Description of deliverables
- Part 3 – Evaluation of Proposals
- Part 4 – Terms and Conditions of the RFP Process
- Appendices – Forms and RFP Particulars

PURPOSE

The purpose of this report is to make a recommendation for purchasing the pedestrian level lighting fixtures for the Fundy Quay public space projects.

STRATEGIC ALIGNMENT

Fundy Quay is a catalytic project that aligns with many of Council's priorities including Grow, Green, Belong and Move.

SERVICE AND FINANCIAL OUTCOMES

The proposed cost of the pedestrian level lighting fixtures from Schréder Inc. for the Fundy Quay public space projects is $453,445.00 plus HST. This cost is for the supply of 58 pedestrian level lighting fixtures in variety of styles.

An amount of $12,670,000 is budgeted for architectural design and construction management services, and construction for this project. Furthermore, a projected surplus from the Fundy Quay Site Works project is being held as a strategic contingency to support the realization of the full architectural design for the Fundy Quay Public Space.

There is sufficient funding in the approved Fundy Quay public space project budget to proceed now with the supply and delivery of 58 pedestrian level lighting fixtures. The pricing for the 58 pedestrian level lighting fixtures is aligned with the Engineer's' estimate for the materials, which was $450,000 plus HST.

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS – Supply Chain Management

Supply Chain Management facilitated the RFP process to solicit proposals for the pedestrian level light fixtures.

As such an RFP closed on Thursday, March 31, 2022 with only one response being submitted, that of Schréder Inc. of Montreal, PQ.

A review committee, consisting of staff from Supply Chain Management, Envision Saint John and the City's consultants reviewed the submission for completeness and compliance with the RFP requirements and selection criteria consisting of the following:

1. ***Quality and Completeness***
2. ***Specifications and Quality***
3. ***Cost***

The proposal submitted by Schréder Inc. met all the requirements set forth in the RFP at a cost acceptable by staff and in line with the budget.

The above process is in accordance with the City's Procurement Policy and Supply Chain Management support the recommendation being put forth.

ATTACHMENTS

N/A

SAINT JOHN

COUNCIL REPORT

M&C No.	2022-124
Report Date	April 12, 2022
Meeting Date	April 19, 2022
Service Area	Utilities and Infrastructure Services

Her Worship Mayor Donna Noade Reardon and Members of Council

SUBJECT: REQUEST FOR PROPOSALS 2022- 562002P: PUBLIC SPACE AT MARKET SLIP & HARBOUR PASSAGE EXTENSION - CONCRETE UNIT PAVERS

AUTHORIZATION

Primary Author	Commissioner/Dept. Head	City Manager
J. Brent McGovern	***J. Brent McGovern***	***John Collin***

RECOMMENDATION

It is recommended that:

1) the proposal from Techo-Bloc Inc. to supply 59,808 square feet of concrete pavers in variety of styles in the amount of $652,903.78 plus HST as calculated based upon estimated quantities be accepted;
2) that Supply Chain Management be authorized to purchase the concrete unit pavers; and
3) that the Mayor and City Clerk be authorized to execute any necessary contract documents.

EXECUTIVE SUMMARY

The purpose of this report is to recommend that Council award the contract for supply and delivery of concrete unit pavers for the Fundy Quay Public Space projects to Techo-Bloc Inc.

PREVIOUS RESOLUTIONS

February 22, 2021; (M&C 2021-05) Approved Utility and General Fund – Revised 2021 Capital Programs

February 22, 2021: (M&C 2021-045) Approved Architectural Services: Loyalist Plaza & Fundy Quay Harbour Passage Extension.

December 20, 2021: (M&C 2021-366) Approved Contract 2021-083001T: Public Space at Market Slip – Site Demolition.

REPORT

BACKGROUND

The approved 2022 General Fund Capital Program includes funding for the Fundy Quay public space improvements at the Market Slip and the extension of Harbour Passage along the perimeter of the Fundy Quay Site.

Traditionally, the City would issue a preselection Request for Proposal (RFP) to select the most appropriate materials for a construction project such as the Fundy Quay public space projects. The preselection RFPs are based on the City's Purchasing Policy and the designer would include the successful supplier's materials in the construction specifications. Contractors bidding on the project are directed to purchase the preselected materials from the successful supplier. However, due to supply chain issues, waiting to procure certain materials through a contractor has the potential to result in cost increases and significant construction delays. Upon becoming aware of this risk, the project team concluded it was prudent to prepurchase specific materials for the Fundy Quay project as early as possible, with the goal of minimizing schedule risk impacts to the extent possible. The Concrete Unit Pavers are one of seven items being acquired through an advanced procurement strategy and will be supplied to the Contractor for installation under a separate contract which is planned to be tendered in May 2022.

A Request for Proposals (RFP) was developed for concrete unit paver supply which detailed the minimum performance requirements for the pavers to meet for the project and included the following components:

- Part 1 – Introduction
- Part 2 – Description of deliverables
- Part 3 – Evaluation of Proposals
- Part 4 – Terms and Conditions of the RFP Process
- Appendices – Forms and RFP Particulars

PURPOSE

The purpose of this report is to make a recommendation for purchasing the Concrete Unit Pavers for the Fundy Quay public space projects.

STRATEGIC ALIGNMENT

Fundy Quay is a catalytic project that aligns with many of Council's priorities including Grow, Green, Belong and Move.

SERVICE AND FINANCIAL OUTCOMES

The proposed cost of the concrete unit pavers from Techo-Bloc Inc. for the Fundy Quay public space projects is $652,903.78 plus HST. This cost is for the supply of 59,808 square feet of concrete pavers in variety of styles.

An amount of $12,670,000 is budgeted for architectural design and construction management services, and construction for this project. Furthermore, a projected surplus from the Fundy Quay Site Works project is being held as a strategic contingency to support the realization of the full architectural design for the Fundy Quay Public Space.

There is sufficient funding in the approved Fundy Quay public space project budget to proceed now with the supply and delivery of concrete unit pavers. The pricing for the Concrete Unit Pavers is within the Engineer's' estimate for the materials, which was $660,000 plus HST.

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS – Supply Chain Management

Supply Chain Management facilitated the RFP process to solicit proposals for the concrete unit pavers.

As such an RFP closed on Tuesday, April 5, 2022 with only one response being submitted, that of Techo-Bloc Inc. of Saint-Hubert, QC.

A review committee, consisting of staff from Supply Chain Management, Envision Saint John and the City's consultants reviewed the submission for completeness and compliance with the RFP requirements and selection criteria consisting of the following:

1. ***Quality and Completeness***
2. ***Specifications and Quality***
3. ***Cost***

The proposal submitted by Techo-Bloc Inc. met all the requirements set forth in the RFP at a cost acceptable by staff and in line with the budget.

The above process is in accordance with the City's Procurement Policy and Supply Chain Management support the recommendation being put forth.

ATTACHMENTS

N/A

COMMON COUNCIL REPORT

M&C No.	2022-126
Report Date	April 12, 2022
Meeting Date	April 19, 2022
Service Area	Growth and Community Services

Her Worship Mayor Donna Noade Reardon and Members of Common Council

SUBJECT: Proposed By-Law Amendment – Heritage Conservations Areas By-Law

OPEN OR CLOSED SESSION

This matter is to be discussed in open session of Common Council.

AUTHORIZATION

Primary Author	Commissioner	Acting City Manager
Jennifer Kirchner	***Jacqueline Hamilton***	***Kevin Fudge***

RECOMMENDATION

Your City Manager recommends that Common Council set the public hearing date of May 16, 2022 to consider an amendment to the Heritage Conservation Areas By-Law concerning the removal of 66 Sydney Street from the Princess Street Heritage Conservation Area.

EXECUTIVE SUMMARY

On July 26, 2021, a letter was submitted to Common Council requesting the removal of the property at 66 Sydney Street from designation in the Princess Street Heritage Conservation Area under *HC-1 Saint John Heritage Conservation Areas By-Law*. The submission was deemed completed on December 31, 2021. Having subsequently been reviewed by the Heritage Development Board, with its recommendation to Common Council made, this report is submitted to set the public hearing date for the proposed amendment.

Outline the body of your report in this section.

PREVIOUS RESOLUTION

N/A

REPORT

66 Sydney Street (also known as 157-161 Princess Street and 66 Sydney Street) is a corner-lot residential building in the Princess Street Heritage Conservation Area on the central peninsula. The property owner submitted a request to have the municipal designation removed for the property; such requests are considered as by-law amendments heard through Common Council.

Staff is recommending Common Council set a public hearing for May 16, 2022.

STRATEGIC ALIGNMENT

The proposed amendment does not align with existing corporate priorities relating to the importance of growth and of vibrant neighbourhoods.

SERVICE AND FINANCIAL OUTCOMES

N/A

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

The Heritage Development Board unanimously recommended for Common Council to move to deny the proposed amendment at the Board's meeting of March 2, 2022.

ATTACHMENTS

N/A

SAINT JOHN

COUNCIL REPORT

M&C No.	2022-130
Report Date	April 12, 2022
Meeting Date	April 19, 2022
Service Area	Utilities and Infrastructure Services

Her Worship Mayor Donna Noade Reardon and Members of Council

SUBJECT: 2022 Roadway Construction Projects

OPEN OR CLOSED SESSION

This matter is to be discussed in open session of Council.

AUTHORIZATION

Primary Author	Commissioner/Dept. Head	City Manager
Kurt Smith	**J. Brent McGovern/ Michael Baker**	**John Collin**

RECOMMENDATION

It is recommended that this report be received and filed.

EXECUTIVE SUMMARY

The City of Saint John has several major construction projects under both the General Fund and Utility Fund Capital Programs that will have a significant impact on traffic arteries. A map identifying the location of 2022 City projects is attached. Projects that will have a more significant impact on traffic are highlighted later in this report.

PREVIOUS RESOLUTIONs

M&C 2021-303: November 15, 2021; 2022 General Fund and Utility Fund Capital Budgets, Approved

M&C 2021-334: M&C 2021-334: November 29, 2021 – Revised 2019-2023 Canada Community Building Fund (Formerly the Gas Tax Fund) Capital Investment Plan and General Fund Capital Program – Revision 1, Approved.

STRATEGIC ALIGNMENT

This report aligns with Council's Priorities for **GROW, GREEN, BELONG, MOVE** and **PERFORM** as both 2022 Capital Programs have many projects that align with each priority.

REPORT

Staff from local road authorities - Gateway Operations and the City of Saint John met via Microsoft Teams on April 1, 2022, to exchange information on planned construction projects and to consider effects of the construction on the transportation network and traffic in the Saint John region. Also included in the meeting were local utilities Saint John Energy, Bell Aliant, Liberty Utilities and Rogers Communication. The 2022 construction season will again have many large projects with impacts to traffic flows. The meeting was productive with groups sharing information on major projects that will impact traffic flows during the 2022 construction season.

Staff from New Brunswick Department of Transportation and Infrastructure (NBDTI), Enbridge, Irving Oil and Emera Brunswick Pipeline were invited to the meeting but did not attend. City staff will be reaching out to each stakeholder that did not attend this year's meeting in the coming weeks.

The purpose of this report is to update Council on current and planned roadway construction and the steps being taken to help mitigate impacts on users of the transportation network.

Work that will be taking place this season by Gateway Operations:

- Lorneville Underpass
    - Miscellaneous concrete repairs and wearing course replacement.
    - Anticipated construction period of April 4th to July 15th.
- Lancaster Ave Underpass
    - Miscellaneous concrete repairs.
    - Anticipated construction period of April 4th to September 16th.
    - Work will be coordinated with the Riverview Drive overpasses project and the Harbour Bridge project (single lane traffic in each direction on Route 1).
- Riverview Drive Overpasses
    - Miscellaneous concrete repairs, median barrier repairs, expansion seals and wearing course replacement.
    - Anticipated construction period of April 4th to September 16th.
    - Work will be coordinated with the Lancaster Ave Overpass project and the Harbour Bridge project (single lane traffic in each direction on Route 1).
- Mill Street Viaduct
    - Miscellaneous concrete repairs.
    - Minimal traffic control on Hilyard Street and Station Street expect.

- Gilbert (Crown St) Street Viaduct
    - Miscellaneous concrete repairs.
- MacKay Highway Overpasses – General
    - Miscellaneous concrete repairs.
- Fox Farm Overpasses
    - Miscellaneous concrete repairs.
    - Wearing course replacement in Westbound lanes.
    - Schedule to be determined.

NBDTI Projects

NBDTI will be undertaking the following projects in 2022:

- Harbour Bridge Repairs - Traffic on Route 1 will be reduced to a single lane in each direction.

It should be noted that Public Works and Transportation Services and NBDTI have and will continue to collaboratively monitor traffic flow and community feedback and identify further improvements for the multiple-year Harbour Bridge rehabilitation project and required modifications to the Reversing Falls Bridge.

Saint John Energy Projects

- Manawagonish Road Conversion to hendrix wire (Kierstead Road to Catherwood Street).
- Upgrades to underground vaults on Metcalf Street and Germain Street.
- Underground feeder upgrade at Union Street and Germain Street and Smythe Street and Union Street.
- Manhole upgrade at Intersection of Paradise Row and Somerset Street.
- Conduit and Primary Cable Installation at intersection of Princess Street and Charlotte Street.
- Replacing direct buried cable on Marlin Drive.
- Replacing direct buried cable on Daniel Drive.

Projects expected to start March 2022 and continue until summer 2023:

- New Burchill Wind Project electrical substation on King William Road.
- New 66kV overhead cable lines between new Burchill substation and the existing Manawagonish Road substation.
- Modifications to the existing Manawagonish Road Substation.
- New 66kV overhead cable lines between the existing Manawagonish Road substation and the existing Raynes substation.
- Modifications to the existing Raynes substation (off Fairville Boulevard)
- New 66kV overhead cable lines between the existing Raynes substation and New Paradise Row Substation.
- New Paradise Row substation at 90 Paradise Row.

- New duct banks to be installed in front of 90 Paradise Row as well as along Smythe Street and Station Street.
- Decommissioning of Union Street Substation and Crown Street Substation.

City Projects

The attached City of Saint John Projects Map for 2022 includes projects under several categories:

- Asphalt Maintenance Resurfacing
- Water and Sewer Construction
- Street Reconstruction
- Roadway Maintenance Asphalt Overlay
- Quality of Life Projects

Generally, the Asphalt Maintenance Resurfacing projects are carried out in stages: asphalt cold milling, structure adjustments and paving. These projects are normally of short duration with each location taking a few days to complete depending on the length of roadway to be resurfaced. The construction duration will be longer for those locations where concrete curbs/sidewalks are included.

Water & Sewer Construction requires trench excavation in roadways and will result in lane reductions, but there will be full road closures only in special cases where buried infrastructure is complex and significant work is being carried out simultaneously in various sections of the closed roadway.

Street Reconstruction projects normally involve underground infrastructure renewals and replacement of roadway granulars in preparation for new curb, sidewalk, and asphalt installations. This type of construction work normally requires a full road closure.

Roadway Maintenance Asphalt Overlay projects are carried out where the service life of a street cannot be extended by asphalt maintenance resurfacing and the street is not slated for street reconstruction within the next five years, the street becomes a candidate for local maintenance. The intent of the program is to maintain the street in a functional condition until such time as the street can be reconstructed. City Crew's overlay the existing street surface with a layer of asphalt. As the construction season progresses City staff will provide more details to the public around the streets that will receive an asphalt overlay in 2022 under Public Works and Transportation's program.

In 2022, the City is investing approximately $6.36 million dollars towards Quality-of-Life projects which includes active transportation projects, greening, branding and beautification projects as well as parks and recreation improvements.

Much of the Quality-of Life work will include upgrading walkways/amenities, landscaping and park security, existing playgrounds and improvements as defined by the existing Master Plans.

From the Projects Map, the following projects will result in significant impacts to traffic flow:

- Rockland Road and Burpee Avenue (Parks Street to Paradise Row) – Street Reconstruction – road closure and detour with access for local traffic.

- Bridge Road (Simms Corner to Reversing Falls Bridge) - Asphalt Maintenance Resurfacing – lane reductions. Work will be coordinated with NBDTI's work on the Harbour Bridge. Work for this location is planned to be completed on weekends to avoid significant traffic congestion.

- Crown Street (Hanover Street to Marsh Creek) – Storm sewer construction – lane reduction.

- Germain Street (Lower Cove Loop to St. James Street) – Street Reconstruction – road closure and detour with access for local traffic.

- Golden Grove Road (McAllister Drive to Essex Street) - Asphalt Maintenance Resurfacing - lane reductions.

- Somerset Street (Civic #560 to Churchill Boulevard) – Asphalt Maintenance Resurfacing – lane reductions.

- Catherwood Street (Ready Street to Manawagonish Road) – Storm and Sanitary construction – lane reduction.

- Charlotte Street (Trinity Church to Princess Street) - Street Reconstruction – road closure and detour with access for local traffic.

- Charlotte Street (St. James Street to Lower Cove Loop) - Street Reconstruction – road closure and detour with access for local traffic.

- Sandy Point Road (Foster Thurston Drive to Tucker Park Road) – Asphalt Maintenance Resurfacing – lane reductions.

- Grandview Avenue (Bayside Drive to Cromwell Drive) - Asphalt Maintenance Resurfacing - lane reductions.

- Lower Cove Loop (Charlotte Street to Germain Street) – Water and Sewer Construction – lane reductions.

- Princess Street (Water Street to Germain Street) – Storm Sewer Construction – road closure and detour with access for local traffic.

- Sydney Street (Broad Street to Tin Can Beach) - Street Reconstruction – road closure and detour with access for local traffic.

- Rodney Street (Market Place to Watson Street) - Street Reconstruction – road closure and detour with access for local traffic.

- St. James Street (Charlotte Street to Germain Street) - Street Reconstruction – road closure and detour with access for local traffic.

- Wentworth Street (Elliott Row to Orange Street) - Street Reconstruction – road closure and detour with access for local traffic.

- Fundy Quay Seawall Refurbishment, Development Site & Market Slip Plaza Renewal – Site closure and detour for pedestrian traffic.

- Hilyard Street (Chesley Drive to Paradise Row) - Asphalt Maintenance Resurfacing - lane reductions.

- Union Street (Saint Patrick Street to Germain Street) - Asphalt Maintenance Resurfacing - lane reductions.

- Britain Street (Pitt Street to Wentworth Street) - Street Reconstruction – road closure and detour with access for local traffic.

- Mecklenburg Street (Wentworth Street to Crown Street) - Street Reconstruction – road closure and detour with access for local traffic.

- Peters Street (Waterloo Street to Coburg Street) - Street Reconstruction – road closure and detour with access for local traffic.

- Pitt Street (St. James Street to Broad Street) - Street Reconstruction – road closure and detour with access for local traffic.

- Garden Street (Coburg Street to City Road) - Street Reconstruction – Potential traffic disruptions for this project will be reviewed during the preliminary and detailed design phases of the work to ensure traffic effects are the least possible to the travelling public.

Traffic disruption could be subject to change depending on particular design, contractor availability to perform the work and/or construction circumstances. Detailed traffic control plans will be developed with contractors and design consultants for all major construction projects. In addition to those identified

above, other planned projects shown on the Projects Map are expected to be less disruptive.
There will also be normal operational and maintenance activities carried out by Utilities and Infrastructure Services and Public Works and Transportation Services crews. These are smaller in scope and usually only disrupt traffic on a street or street sections for a relatively short period.

SERVICE AND FINANCIAL OUTCOMES

The planned roadway construction projects will result in improvements to the municipal infrastructure.

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

Keeping citizens informed is a key component of a successful construction season. Utilities and Infrastructure Services, Public Works and Transportation Services, Corporate Communications, and Saint John Police will work together with SJ Transit, SJ Parking, NBDTI, Gateway Operations and the various other utilities and contractors to ensure that the public is kept informed on projects, delays, and changes to traffic patterns. The various groups will also work together to promote information regarding alternate routes and modes of transportation.

The City's Corporate Communications team develops a variety of specific campaigns, and ongoing messaging as needed, to keep the public informed on construction progress throughout the season, along with impacts on the highway and road networks and various forms of transportation.

The following methods will be used to communicate information to the public:

- Public information notices for major projects where required.
- Weekly construction updates posted to the City's website, and searchable by area.
- Comprehensive project information posted on the City's website including a construction map, a list of all projects and an explanation of the work to be carried out and detailed information about large projects.
- "Spot" traffic advisories disseminated as required through various channels including website, media, Twitter, and Facebook.
- Onsite information signage where needed highlighting work and investment.
- Working with Envision Saint John and Uptown SJ to keep visitors/tourists informed.

Many construction projects and activities have begun or are planned for the 2022 construction season. Agencies are coordinating their public communications efforts, and this will continue as projects progress. Despite these efforts, the

public should expect disruption to traffic flows. Patience and understanding on the part of all network users will be important as we make significant infrastructure improvements and investments to modernize Saint John.

ATTACHMENTS

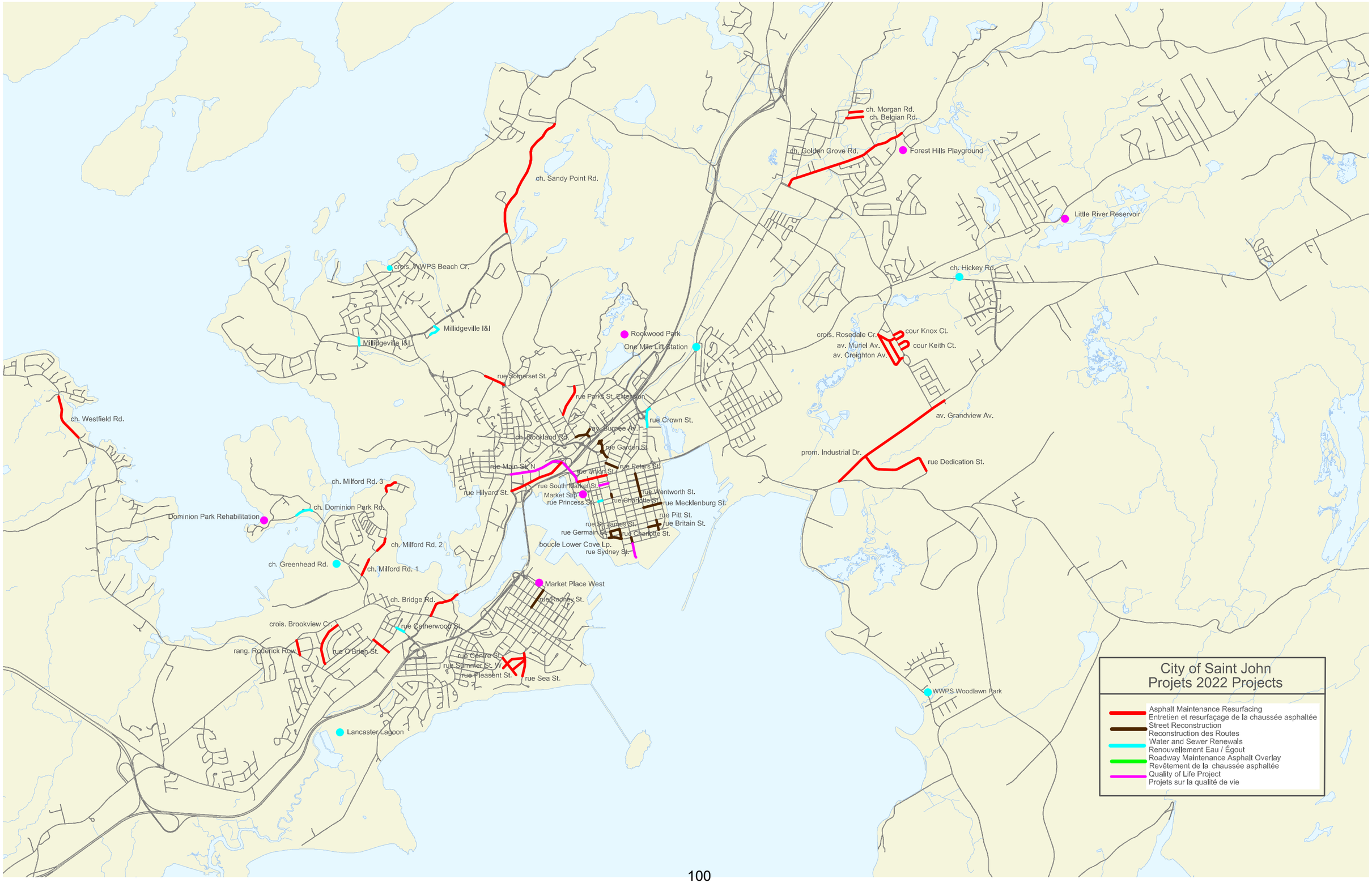
- City of Saint John 2022 Construction Season Projects List
- City of Saint John 2022 Construction Season Projects Map
- City of Saint John Weekly Construction Update (2021 Example)

2022 City Construction Projects

Project Location	Limits	Type of work
Active Transportation - Main Street North	Main Street North	Quality of Life
Beautification of Little River Reservoir	Little River Reservoir	Quality of Life
Belgian Road	Glen Road to Dead End	Asphalt Maintenance Resurfacing Including Curb and Sidewalk
Bridge Road	Simms Corner to Reversing Falls Bridge	Asphalt Maintenance Resurfacing
Britain Street	Pitt Street to Wentworth Street	Street Reconstruction
Brookview Crescent	Mollins Drive to Greendale Crescent	Asphalt Maintenance Resurfacing Including Curb
Burpee Avenue	Rockland Road to Civic # 99	Street Reconstruction
Catherwood Street	Ready Street to Greystone Terrace	Water and Sewer Construction
Centre Street	Fundy Drive to Dead End	Asphalt Maintenance Resurfacing
Charlotte Street	St. James Street to Lower Cove Loop	Street Reconstruction
Charlotte Street	Trinity Church to Princess Street	Street Reconstruction
Coleson Cove Raw Water Transmission Line	Spruce Lake to Coleson Cove	Water and Sewer Construction
Creighton Avenue	York Street to Champlain Drive	Asphalt Maintenance Resurfacing Including Curb
Crown Street	Hanover Street to Marsh Creek	Water and Sewer Construction
Dedication Street	Industrial Drive to Expansion Avenue	Asphalt Maintenance Resurfacing Including Curb
Dominion Park Rehabilitation	Dominion Park	Quality of Life
Dominion Park Road	Lift Station A to Gravity Sewer	Water and Sewer Construction
Forest Hills Play Ground	Forest Hills School	Quality of Life
Garden Street	Coburg Street to City Road	Street Reconstruction
Germain Street	St. James St. to Lower Cove Loop	Street Reconstruction
Golden Grove Road	McAllister Drive to Essex Street	Asphalt Maintenance Resurfacing Including Curb and Sidewalk
Grandview Avenue	Bayside Drive to Cromwell Drive	Asphalt Maintenance Resurfacing
Greenhead Road	381 Greenhead Road	Water and Sewer Construction
Harbour Passage	Sydney Street (Broadview Avenue to Tin Can Beach	Quality of Life / Street Reconstruction
Hilyard Street	Chesley Drive to Paradise Row	Asphalt Maintenance Resurfacing
Industrial Drive	Grandview Avenue to Dedication Street	Asphalt Maintenance Resurfacing Including Curb
Keith Court	Champlain Drive to Champlain Drive	Asphalt Maintenance Resurfacing Including Curb
Knox Court	Champlain Drive to Champlain Drive	Asphalt Maintenance Resurfacing Including Curb
Lancaster Lagoon	Lancaster Lagoon	Water and Sewer Construction
Lower Cove Loop	Charlotte Street to Germain Street	Water and Sewer Construction
Market Place West Improvements	Market Place West	Quality of Life
Mecklenburg Street	Wentworth Street to Crown Street	Street Reconstruction
Milford Road 1	Greenhead Road to Civic # 472	Asphalt Maintenance Resurfacing
Milford Road 2	Civic # 412 to Williams Street	Asphalt Maintenance Resurfacing
Milford Road 3	Civic # 136 to Civic # 63	Asphalt Maintenance Resurfacing Including Curb and Sidewalk
Millidgeville I&I	Candlewood lane and Caledonia Brook	Water and Sewer Construction
Morgan Road	Glen Road to Dead End	Asphalt Maintenance Resurfacing Including Curb and Sidewalk
Muriel Avenue	Rosedale Crescent to Creighton Avenue	Asphalt Maintenance Resurfacing Including Curb
O'Brien Street	Manawagonish Road to Fairville Boulevard	Asphalt Maintenance Resurfacing
One Mile Lift Station	Rothesay Avenue at Russell Street	Water and Sewer Construction
Parks Street Extension	Parks Street to Parkwood Avenue	Asphalt Maintenance Resurfacing
Peters Street	Waterloo Street to Coburg Street	Street Reconstruction
Phase III Rockwood Park Master Plan	Rockwood Park	Quality of Life
Pitt Street	St. James Street to Broad Street	Street Reconstruction
Pleasant Street	Sea Street to Centre Street	Asphalt Maintenance Resurfacing
Princess Street	Water Street to Germain Street	Water and Sewer Construction
Quality of Life Investment	Market Slip Plaza	Quality of Life
Rockland Road	Parks Street to Paradise Row	Street Reconstruction
Roderick Row	Manchester Avenue to Dever Road	Asphalt Maintenance Resurfacing Including Curb and Sidewalk
Rodney Street	Market Place to Watson Street	Street Reconstruction

2022 City Construction Projects

Rosedale Crescent	Champlain Drive to Creighton Avenue	Asphalt Maintenance Resurfacing Including Curb
Sandy Point Road	Tucker Park Road to Foster Thurston Drive	Asphalt Maintenance Resurfacing
Sea Street	Whipple Street to Railway Track	Asphalt Maintenance Resurfacing
Somerset Street	Churchill Boulevard to Civic # 560	Asphalt Maintenance Resurfacing
St. James Street	Germain Street to Charlotte Street	Street Reconstruction
Summer Street West	Sea Street to Dead End	Asphalt Maintenance Resurfacing
Sydney Street	Broad Street to Broadview Avenue	Street Reconstruction
Traffic Signals	Garden Street @ Hazen Street	Street Reconstruction
Traffic Signals	Garden Street @ City Road	Street Reconstruction
Union Street	Charlotte Street to Saint Patrick Street	Asphalt Maintenance Resurfacing
Wentworth Street	Elliott Row to Orange Street	Street Reconstruction
Westfield Road	Civic # 2200 to Civic # 2400	Asphalt Maintenance Resurfacing
Wastewater Lift Station Beach Crescent	11 Beach Crescent	Water and Sewer Construction
Wastewater Lift Station Woodlawn Park	1335 Red Head Road	Water and Sewer Construction


ch. Morgan Rd.
ch. Belgian Rd.
ch. Golden Grove Rd.
Forest Hills Playground
ch. Sandy Point Rd.
Little River Reservoir
crois. WWPS Beach Cr.
ch. Hickey Rd.
Millidgeville I&I
Millidgeville I&I
Rockwood Park
One Mile Lift Station
crois. Rosedale Cr.
av. Muriel Av.
av. Creighton Av.
cour Knox Ct.
cour Keith Ct.
rue Somerset St.
rue Parks St. Extension
rue Crown St.
av. Grandview Av.
ch. Westfield Rd.
ch. Rockland Rd.
av. Burpee Av.
rue Garden St.
prom. Industrial Dr.
rue Dedication St.
rue Main St. N
rue Union St.
rue Peters St.
ch. Milford Rd. 3
rue Hillyard St.
rue South Market St.
rue Wentworth St.
Market Slip
rue Princess St.
rue Charlotte St.
rue Mecklenburg St.
ch. Dominion Park Rd.
Dominion Park Rehabilitation
rue Pitt St.
rue Britain St.
rue St. James St.
rue Germain St.
rue Charlotte St.
ch. Milford Rd. 2
boucle Lower Cove Lp.
rue Sydney St.
ch. Greenhead Rd.
ch. Milford Rd. 1
Market Place West
rue Rodney St.
ch. Bridge Rd.
crois. Brookview Cr.
rue Catherwood St.
rang. Roderick Row
rue O'Brien St.
rue Centre St.
rue Summer St. W.
rue Pleasant St.
rue Sea St.
Lancaster Lagoon
WWPS Woodlawn Park
City of Saint John
Projets 2022 Projects
Asphalt Maintenance Resurfacing
Entretien et resurfaçage de la chaussée asphaltée
Street Reconstruction
Reconstruction des Routes
Water and Sewer Renewals
Renouvellement Eau / Égout
Roadway Maintenance Asphalt Overlay
Revêtement de la chaussée asphaltée
Quality of Life Project
Projets sur la qualité de vie

WEEKLY CONSTRUCTION UPDATE

Utilities & Infrastructure Services
Services d'utilité publique et d'infrastructure
(506) 658-4455 / service@saintjohn.ca
http://www.saintjohn.ca

Construction Update/Nouvelles hebdomadaires **August 27, 2021/ le 27 août 2021**

Drive with Caution or Use Alternate Routes
Police Will Be Monitoring Traffic
Expect Traffic Interruptions

Conduisez prudemment ou utilisez un trajet de rechange
La police surveillera la circulation
S'attendre à des interruptions de la circulation

CITY OF SAINT JOHN PROJECTS

NEW/NOUVEAU

Contract 2021-02: Princess Street (Water St. to Prince William St. & Canterbury St. to Germain St.) – Sanitary and Storm Sewer Work involves the installation of new sanitary and storm sewers on Princess Street between Water Street and Prince William Street, and also between Canterbury Street and Germain Street. Street will be closed to vehicle traffic at times. Pedestrian access will be maintained. Motorists are asked to find an alternative route during the construction. Please follow signage and use caution when travelling within the construction zone. **Anticipated completion: September 15, 2021**	**Contrat 2021-02 : Rue Princess (Rue Water à rue Prince William et rue Canterbury à rue Germain) – égouts sanitaires et d'eaux pluviales** Les travaux comprennent l'installation de nouveaux égouts sanitaires et d'eaux pluviales sur la rue Princess, entre la rue Water et la rue Prince William, ainsi qu'entre la rue Canterbury et la rue Germain. La rue sera parfois fermée à la circulation automobile. L'accès aux piétons sera maintenu. On demande aux automobilistes de trouver une autre voie pendant les travaux de construction. Veuillez suivre les indications et faire preuve de prudence lorsque vous conduisez dans la zone de construction. **Achèvement prévu : le 15 septembre 2021**
CONTINUING/ENCOURS:	
Travel Advisory – Chesley Drive	**Avis de circulation – Rue Chesley**

The Department of Transportation and Infrastructure advises the travelling public that the Chesley Drive on ramp, for westbound traffic entering the Saint John Harbour Bridge, will be fully closed to traffic on August 24 and reopening on October 16, 2021, weather permitting. This is in effort to alleviate some congestion and help reduce safety concerns during the rehabilitation work on the bridge structure. Delays are expected and the travelling public is encouraged to plan alternate routes, reduce speed, drive safely, and to check NB511 for updates. The department appreciates the public's patience. **Anticipated Completion: October 16, 2021**	Le ministère des Transports et de l'Infrastructure avise le public que la voie d'accès au pont Harbour de Saint John qui est située sur la promenade Chelsey sera entièrement fermée à la circulation en direction ouest. La fermeture aura lieu du 24 août au 16 octobre, si la météo le permet. Cette mesure est prise afin d'atténuer la congestion routière et d'aider à réduire certaines préoccupations en matière de sécurité dans le cadre des travaux de remise à neuf de la structure du pont. Les automobilistes doivent s'attendre à des délais et sont encouragés à planifier d'autres itinéraires, à réduire leur vitesse, à conduire avec prudence et à consulter le NB511 pour obtenir des mises à jour. Le ministère apprécie la patience du public. **Achèvement prévu : 16 octobre 2021**
<u>Traffic Advisory - Water Street (Saint Patrick Street to Duke Street)</u> **August 23, 2021** - Water Street from the Saint Patrick Street intersection to the Duke Street intersection will be closed to through traffic to allow for the installation of underground storm sewer infrastructure. Detour routes will be provided. Access for local businesses and residents will be provided but delays should be expected. **Anticipated Completion: August 30, 2021**	**<u>Avis de circulation Rue Water (de la rue Saint-Patrick à à la rue Duke)</u>** **le 23 août 2021** - La rue Water, de l'intersection de la rue Saint-Patrick à l'intersection de la rue Duke, sera fermée à la circulation de transit afin de permettre l'installation d'infrastructures souterraines d'égouts pluviaux. Des parcours de contournement seront signalés. L'accès des entreprises locales et des résidents sera assuré, mais des retards devraient être prévus. **Achèvement prévue : le 30 août 2021**
<u>Traffic Advisory – Exit 122</u> **August 16, 2021** - The Department of Transportation and Infrastructure advises the travelling public that Exit 122 (Red Rose ramp) on the Saint John Harbour Bridge will be fully closed to traffic on August 16 for one week, weather permitting. This work is necessary to help complete repairs on the bridge deck.	**<u>Avis de circulation – que la sortie 122</u>** **16 août 2021** - Le ministère des Transports et de l'Infrastructure avise le public que la sortie 122 (la rampe Red Rose) du pont du port de Saint John sera complètement fermée à la circulation le 16 août pour une semaine, si la météo le permet. Ses travaux sont nécessaires pour aider à effectuer les réparations sur le pont.

Delays are expected and the travelling public is encouraged to plan alternate routes, reduce speed, drive safely, and to check NB511 for updates. The department appreciates the public's patience. **Anticipated Completion: August 30, 2021**	Les automobilistes doivent s'attendre à des délais et sont encouragés à planifier d'autres itinéraires réduire leur vitesse, à conduire avec prudence et à consulter le NB511 pour obtenir des mises à jour. Le ministère apprécie la patience du public. **Achèvement prévu : 30 août 2021**
<u>Contract 2021-11: St. James Street (Prince William Street to Germain Street)</u> **July 19, 2021** – The work will involve the renewal of the watermain and sanitary and storm sewer mains as well as full street reconstruction on St. James Street from Prince William Street to Germain Street. Local access will be maintained but delays should be expected. Marked detours will be in place. Please obey traffic signage or choose an alternate route. **Anticipated Completion: September 15, 2021**	**<u>Contrat 2021-11 : Rue St. James (de la rue Prince William à la rue Germain)</u>** **Le 19 juillet 2021** – Les travaux comprendront le renouvellement de la conduite d'eau majeure et des conduites principales d'égouts sanitaires et pluviaux ainsi que la reconstruction complète de la rue St. James, de la rue Prince William à la rue Germain. L'accès local sera maintenu, mais des retards devraient être prévus. Des détours marqués seront en place. Veuillez respecter les panneaux de signalisation routière ou choisir un autre itinéraire. **Achèvement prévu : le 15 septembre 2021**
<u>Contract 2021-07: Broadview Avenue (Charlotte Street to Carmarthen Street)</u> **July 5, 2021** – The work will involve the renewal of the watermain and sanitary and storm sewer mains as well as full street reconstruction on Broadview Avenue from Charlotte Street to Carmarthen Street. Local access will be maintained but delays should be expected. Marked detours will be in place. Please obey traffic signage or choose an alternate route. **Anticipated Completion: October 31, 2021**	**<u>Contrat 2021-07 : Avenue Broadview (de la rue Charlotte à la rue Carmarthen)</u>** **Le 5 juillet 2021** –Les travaux comprendront la réhabilitation des conduites principales d'eau et d'égouts sanitaires et d'eaux pluviales ainsi que la reconstruction complète de l'avenue Broadview de la rue Charlotte à la rue Carmarthen. L'accès local sera maintenu, mais on peut s'attendre à des ralentissements. Des détours marqués seront en place. Veuillez respecter les panneaux de signalisation routière ou choisir une autre voie. **Date d'achèvement prévue : 31 octobre 2021**
Gateway Operations **<u>Traffic Advisory – Lane Restrictions (Exit 112 Underpass – Lorneville Exit)</u>**	Gateway Operations **<u>Avis de circulation – Restrictions de voies – Passage inférieur de la sortie 112 (sortie Lorneville)</u>**

June 28, 2021 - Gateway Operations wishes to advise the public that beginning Monday, June 28th, motorists should expect lane restrictions on the Lorneville underpass structure at Exit 112. Traffic will be reduced to a single lane in both directions until approximately October 31, 2021. **Anticipated Completion: October 31, 2021**	**Le 28 juin 2021** -Gateway Operations souhaite informer le public **que** à compter du lundi 28 juin, les automobilistes doivent s'attendre à des restrictions de voies sur la structure du passage inférieur de Lorneville à la sortie 112. La circulation sera réduite à une seule voie dans les deux directions jusqu'à environ 31 octobre, 2021. **Achèvement prévu : 31 octobre 2021**
Traffic Advisory – Harbour Bridge **June 7, 2021** - The Department of Transportation and Infrastructure advises the travelling public in Saint John that both eastbound and westbound lanes on the Harbour Bridge, from the Market Place underpass to Exit 122 – Saint John centre, will be reduced to one lane each from **June 7 through October 15**. In addition, Exit 121 to Chesley Drive will not be available to eastbound traffic. Significant delays are expected, and the travelling public is encouraged to reduce speed, drive safely, and to check NB511 for updates. The department appreciates the public's patience as this work takes place as part of the Phase 1 rehabilitation of the Harbour Bridge. **Anticipated Completion: October 15, 2021**	**Avis de circulation – pont Harbour** **7 juin 2021** - Le ministère des Transports et de l'Infrastructure avise les gens de Saint John que les voies en direction est et ouest du pont Harbour, soit du passage inférieur de Market Place jusqu'à la sortie 122 vers le centre de Saint John, seront réduites à une voie chacune, **du 7 juin au 15 octobre**. De plus, la sortie 121 vers la promenade Chesley sera fermée à la circulation en direction est. Des délais importants sont à prévoir, et on invite le public à réduire sa vitesse, à conduire avec prudence et à consulter le NB511 pour obtenir des mises à jour. Le ministère apprécie la patience du public. Ces travaux font partie de la première phase de la remise en état du pont Harbour. **Achèvement prévu : 15 octobre 2021**
Contract 2021-06: Princess Street - Water, Sanitary and Storm Sewer Renewal and Street Reconstruction **May 25, 2021** - The work will involve the renewal of the watermains and sanitary and storm sewer mains as well as full street	**Contrat 2021-06 : Rue Princess– Renouvellement des conduites d'eau et des égouts sanitaires et pluviaux, et réfection de rue** **25 mai 2021-** Les travaux porteront sur le renouvellement des conduites principales et des égouts sanitaires et pluviaux ainsi que sur la

reconstruction on Princess Street from Wentworth Street to Crown Street. Local access will be maintained but delays should be expected. Please obey traffic signage or choose an alternate route. **Anticipated Completion: October 1, 2021**	réfection complète des rues Princess, de la rue Wentworth à la rue Crown. L'accès local sera maintenu, mais des retards devraient être prévus. Veuillez respecter les panneaux de signalisation routière ou choisir un autre itinéraire. **Achèvement prévu : 1 octobre 2021**
Contract 2020-18: Prospect Street West – Sanitary Lift Station & Sewer Improvements **May 17, 2021** - Work involves the construction of a new sanitary pumping station forcemain and sewers at the intersection of Walnut Street and Prospect Street West. Motorists are requested to find an alternative route as traffic will be delayed and road closures are expected. Please follow signage and use caution if travelling through the work zone. **Anticipated Completion: August 31, 2021**	**Contrat 2020-18 : rue Prospect Ouest – Améliorations à la station de relèvement sanitaire et au système d'égouts** **17 mai 2021** - Les travaux comprennent la construction d'une nouvelle conduite de refoulement et de nouveaux égouts pour la station de pompage sanitaire située à l'intersection des rues Walnut et Prospect Ouest. On demande aux automobilistes de trouver une autre voie, car la circulation sera retardée et les fermetures de routes sont attendues. Veuillez suivre les indications et faire preuve de prudence si vous parcourez la zone des travaux. **Achèvement prévu : 31 août 2021**
Asphalt Resurfacing 2020 -17 Michael Crescent — Anticipated Completion : August 31, 2021 Cindy Lee Street — Anticipated Completion : August 31, 2021 Kennington Street — Anticipated Completion : August 31, 2021 Morley Crescent — Anticipated Completion : September 30, 2021 Alpine Street — Anticipated Completion : September 30, 2021 Lancaster Street — Anticipated Completion : September 30, 2021	**Refaçage de l'asphalte de 2020 -17** Rue Michael — Achèvement prévu : 31 août 2021 Rue Cindy Lee — Achèvement prévu : 31 août 2021 Rue Kennington — Achèvement prévu : 31 août 2021 Rue Morley — Achèvement prévu : 30 septembre 2021 Rue Alpine — Achèvement prévu : 30 septembre 2021 Rue Lancaster — Achèvement prévu : 30 septembre 2021

Contract 2020-01: Waterloo Street (Haymarket Square to Castle Street) – Water, Sanitary and Storm Sewer Renewal and Street Reconstruction **April 19, 2021** - The work will involve the renewal of the watermains and sanitary and storm sewer mains as well as full street reconstruction on Waterloo Street from Haymarket Square to Castle Street. This project will also involve the reconfiguration of the Waterloo Street/Haymarket Square intersection. During construction sections of Waterloo Street will be closed to through traffic. Local access will be maintained but delays should be expected. Please obey traffic signage or choose an alternate route. **Anticipated Completion: October 1, 2021**	**Contrat 2020-01 : Rue Waterloo (de Haymarket Square à la rue Castle) – Renouvellement d'une conduite d'eau, d'égout sanitaire et pluvial, et réfection de la rue** **19 avril 2021** - Les travaux porteront sur le renouvellement des conduites maîtresses et des conduites, d'égout sanitaire et pluvial, ainsi que la réfection de toute la rue Waterloo, de Haymarket Square à la rue Castle. Ce projet comprendra également la reconfiguration de l'intersection de la rue Waterloo et de Haymarket Square. Pendant les travaux, les tronçons de la rue Waterloo seront fermés à la circulation. L'accès local sera maintenu, mais des retards devraient être prévus. Veuillez respecter les panneaux de signalisation routière ou choisir un autre itinéraire. **Achèvement prévu : 1er octobre 2021**

The City of Saint John

PROCLAMATION

WHEREAS: Immunize Canada has identified immunization in Canada as an important public health measure for all Canadians;

WHEREAS: Parents and health care providers in every community have a responsibility to ensure that children are immunized on time and receive the full schedule of vaccinations required to protect them from serious diseases;

WHEREAS: A week profiling the importance of immunization in Canada would increase public awareness that many diseases are effectively and safely controlled by immunization, thereby reducing the burden of illness in our communities;

WHEREAS: Immunization is considered to be the most cost-beneficial health intervention and one of the few that systematically demonstrates far more benefits than costs;

WHEREAS: Canada is joining other countries around the world to encourage childhood immunization around World Immunization Week, sponsored by the World Health Organization.

NOW THEREFORE**:** I, ***Mayor Donna Noade Reardon,*** of ***Saint John*** do hereby proclaim the week of April 23 to April 30, 2022, as **"National Immunization Awareness Week"**, in The City of Saint John.

In witness whereof I have set my hand and affixed the official seal of the Mayor of the City of Saint John.

The City of Saint John

PROCLAMATION

WHEREAS: The GBS/CIDP Foundation of Canada is a national, not for profit patient organization that supports patients and families afflicted with Guillain-Barré Syndrome, Chronic Inflammatory Demyelinating Polyneuropathy, and variants such as Multifocal Motor Neuropathy;

WHEREAS: GBS has a sudden onset of symptoms, which can cause complete paralysis within a day. Recovery can be unpredictable, patients and their families face an uncertain future, usually requiring months of hospital care without knowing if or when they will recover, or whether they will face long-term disabilities;

WHEREAS: Earlier diagnosis, treatment, and access to rehabilitation services can improve the chances of avoiding permanent lifelong residual damage of the nerves. The cause of these conditions is unknown, and can develop in any person, regardless of age, gender or ethnic background;

WHEREAS: We are working to raise awareness of these rare conditions so that future patients get help sooner and will know that our organization is here to provide hope;

WHEREAS: We provide support and information through trained volunteers, our website, materials provided to hospitals, local and online peer-to-peer support group meetings, patient educational events and build awareness within the medical community.

WHEREAS: We advocate for access to diagnosis and appropriate treatment, and also support Canadian research that aims to improve the quality of life of GBS, CIDP, and MMN patients.

NOW THEREFORE*:** I, ***Mayor Donna Noade Reardon, of ***Saint John*** do hereby proclaim the month of May 2022, as "**GBS/CIDP Awareness Month"**, in The City of Saint John.

In witness whereof I have set my hand and affixed the official seal of the Mayor of the City of Saint John.





COMMON COUNCIL REPORT

M&C No.	2022-123
Report Date	April 12, 2022
Meeting Date	April 19, 2022
Service Area	General Counsel

Her Worship Mayor Donna Noade Reardon and Members of Common Council

SUBJECT: **Initiate Stop-Up and Closure for Portion of Chipman Hill**

AUTHORIZATION

Primary Author	Commissioner/Dept. Head	City Manager
Curtis Langille	***Melanie Tompkins***	***John Collin***

RECOMMENDATION

It is recommended that Common Council amend the By-law Respecting the Closing of Roads, Streets or Highways in The City of Saint John to stop-up and close an 11 square metre portion of a public street known as Chipman Hill.

EXECUTIVE SUMMARY

A numbered company, 703732 N.B. Ltd. (the "Owner"), owns a property at civic #15 Market Square (City Hall). The Owner is currently renovating upper floors in the building and is planning a major renovation to the pedway level, commonly referred to as the Shoppes of City Hall. The Owner has asked the City to stop-up and close an 11 square metre portion of Chipman Hill right-of-way to enable the construction of a wheelchair accessible ramp into the pedway level of the building. The small area of street right-of-way to be closed is a portion of the accent sidewalk area and does **not** include any of the travelled pedestrian walkway or the travelled portion of the street.

The purpose of this report is to provide, for the public hearing, a brief summary of the reason behind the request by the Owner, and the staff recommendation, to the stop-up and close a small portion of Chipman Hill.

PREVIOUS RESOLUTION

Common Council, at its meeting on April 4, 2022 adopted the following resolution:

> 1. That the Public Hearing to consider the passing of an amendment to the Street Closing By-law to Close an 11 square metre portion of a public street known as Chipman Hill, as shown on a Plan of Survey titled, "Showing portion of Chipman Hill, City of Saint John, Saint John County, New Brunswick" (see attached), be set for Tuesday, April 19, 2022 at 6:30 p.m. in the Council Chamber;

2. That Common Council authorize the publishing of a notice of its intention to consider the passing of such By-law, identified above;

3. In the event that Common Council gives Third Reading to the By-Law Amendment as stated above, that the City sell the property to 703732 N.B. Ltd. for a purchase price of $2,500.00, and that the purchaser be responsible for:

a. any plan of survey required to initiate the process for the stop-up and closure for a portion of Chipman Hill; and
b. any fees or administrative processes to effect the conveyance of the property; and

4. That the Mayor and City Clerk be authorized to execute the documents necessary to effect the transaction.

REPORT

The Owner of the property known as City Hall has been actively renovating the upper floors of its building. As part of its renovations, the Owner is planning to completely renovate the pedway level of the building, commonly referred to as the Shoppes of City Hall. As part of this project, the owner intends to construct a concrete wheelchair accessible ramp that will run parallel to Chipman Hill. Due to the minimal space between the existing building and associated structure and the property line abutting Chipman Hill street right-of-way, the Owner is requesting the City to stop-up and close an 11 square metre (118 square foot) portion of the street right-of-way to enable this project to move forward.

The area to be closed extends approximately one metre beyond the common property boundary shared between the City Hall building and the street right-of-way. This area includes an existing brick accent area, adjacent to the existing pedestrian walkway. There would be no impact to motorists or pedestrians in this request. City staff have no objection to this request to close and convey to 703732 N.B. Ltd. the 11 square metres, as shown on the attached plan of survey.

Public Works and Transportation are supportive of the request to close the minimal amount of undeveloped right-of-way, as requested by the Owner to facilitate its development.

Staff confirms that the Notice requirements of the City's By-Law Respecting the Closing of Roads, Streets or Highways in The City of Saint John (By-Law LG-4) have been met. A copy of the advertised public notice is attached to this report.

STRATEGIC ALIGNMENT

This report aligns with Council's BELONG, MOVE and GROW priorities.

SERVICE AND FINANCIAL OUTCOMES

All costs related to the stop-up and closure process, including all survey costs and fees associated with the subsequent land transfer and registration fees are the responsibility of the Owner. The City will receive $2,500.00 for the sale of 11 square metres of land. No services will be impacted by this land sale.

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

Growth and Community Services (Planning and Building Inspection), Public Works and Transportation and Infrastructure Development and GCO provided input into the preparation of this report.

ATTACHMENTS

1. *Proposed Amendment to Street Closing By-law;*
2. *Plan of Survey March 28, 2022;*
3. *Public Notice related to proposed Street Closing Public Hearing;*
4. *Plan of Survey February 25, 2022; and*
5. *Location map.*

BY-LAW NUMBER L.G. 4-1
A BY-LAW RESPECTING THE CLOSING OF ROADS, STREETS OR HIGHWAYS IN THE CITY OF SAINT JOHN

Be it enacted by the Common Council of The City of Saint John as follows:

A By-law of The City of Saint John entitled, "A By-law Respecting The Closing of Roads, Streets or Highways in The City of Saint John", enacted on the eleventh day of March, A.D. 2019, is hereby amended by adding thereto Section 6 immediately after Section 5 thereof, as follows:

6 The City of Saint John does hereby stop up and close permanently the following street:

CHIPMAN HILL: All that portion of Chipman Hill, a public street in the City of Saint John, in the County of Saint John and Province of New Brunswick, comprising 11 square metres as shown on a Plan of Survey titled, "Showing portion of Chipman Hill, City of Saint John, Saint John County, New Brunswick," prepared by Hughes Surveys & Consultants Inc. and dated March 28, 2022 attached hereto.

IN WITNESS WHEREOF The City of Saint John has caused the Corporate Common Seal of the said City to be affixed to this by-law the *** day of ***, A.D. 2022 and signed by:

ARRÊTÉ N^{O} L.G. 4-1
ARRÊTÉ RELATIF A LA FERMETURE DES CHEMINS, DES RUES OU DES ROUTES DAN THE CITY OF SAINT JOHN

Lors d'une réunion du conseil communal, The City of Saint John a décrété ce qui suit :

Par les présentes, l'arrêté de The City of Saint John intitulé, « Arrêté relatif à la fermeture des chemins, des rues ou des routes dans The City of Saint John», décrété le 11 mars 2019, est modifié par l'ajout de l'article 6 immédiatement après l'article 5, comme suit :

6 Par les présentes, The City of Saint John barre et ferme de façon permanente la rue suivante :

HILL CHIPMAN: Toute la partie de la Hill Chipman, une rue publique dans la ville de Saint John, comté de Saint John, dans la province du Nouveau-Brunswick, d'une superficie d'environ 11 mètres carrés comme le montre le plan d'arpentage intitulé « Partie du plan d'arpentage indiquant la Hill Chipman ville de Saint John, comté de Saint John, province du Nouveau-Brunswick », préparé par Hughes Surveys & Consultants Inc. et daté du 28 mars 2022, joint aux présentes.

EN FOI DE QUOI, The City of Saint John a fait apposer son sceau communal sur le présent arrêté le ** **** 2022, avec les signatures suivantes :

_____
Mayor/Maire

_____
City Clerk/Greffier communal

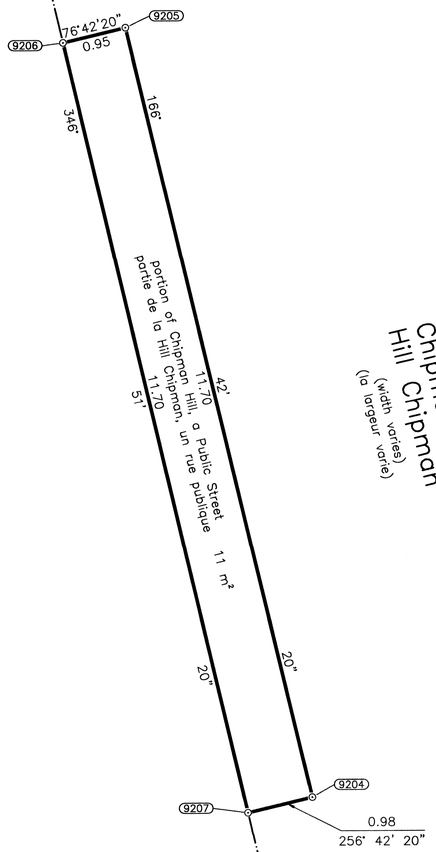
First Reading -
Second Reading -
Third Reading -

Première lecture -
Deuxième lecture -
Troisième lecture -

ENDORSEMENTS

NEW BRUNSWICK LAND SURVEYOR
MARC J. CORMIER 395
ARPENTEUR-GÉOMÈTRE DU NOUVEAU-BRUNSWICK

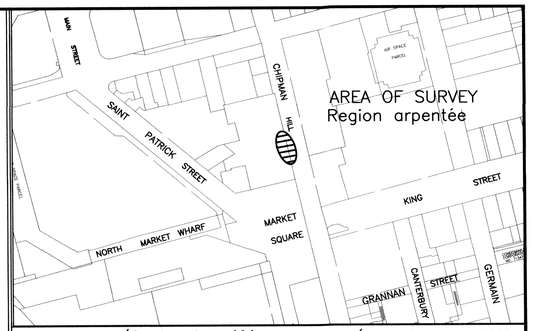
A N B L S
No. 223807
A A G N B



PID/NID
00040139
Lot A
see/voir Plan F50 No. 26

Chipman Hill/
Hill Chipman
(width varies)
(la largeur varie)

New Brunswick Grid



Key Plan/Carte de référence Échelle/Scale 1 : 3000

Registration Data/Information d'enregistrement

The City of Saint John, Statutes of New Brunswick 1917, 8 George V, Chap. 48, section 2 .
La Ville de Saint John, Lois du Nouveau–Brunswick 1917, 8 George V, Chapitre 48, section 2 .

Notes

1) Directions are New Brunswick Grid azimuths derived from tabulated N.B. coordinate survey monuments.
1) Les directions sont des azimuts de quadrillage du Nouveau–Brunswick dérivés de N.B. des monuments d'arpentage de coordonnées tabulés.
2) All distances are in metres , to convert to imperial equivalents divide by 0.3048 .
2) Les distances sont en mètres, Veuillez diviser les valeurs métriques par 0.3048 pour obtenir l'équivalence impériale .
3) Area of survey outlined thus ⊙——⊙ , peripheral information compiled from various sources .
3) La région arpenteé est montrée ainsi ⊙——⊙ , l'information périphérique fut compilée de diverses sources .
4) All document and plan references refer to Registry Office for Saint John County .
4) Les références des documents et des plans sont du Bureau d'enregistrement du comté de Saint John .
5) Field survey completed on March 17, 2022 .
5) L'arpentage sur le chantier fût complété le 17 mars, 2022.
6) All computations performed and coordinates shown on this plan are based on New Brunswick Stereographic Double Projection and the NAD83(CSRS) Ellipsoid as realized by Service New Brunswick , High Precision Network coordinate survey monuments .
6) Les calculs et les coordonnées montrés sur ce plan sont basés sur la projection stéréographique double du Nouveau–Brunswick et l'ellipsoïde NAD83(CSRS) telles que déterminées par les coordonnees Réseau de grande précision des monuments de Services Nouveau–Brunswick .

New Brunswick Grid Co–Ordinate Values
Liste des coordonnées géodésiques du Nouveau–Brunswick

Sta.	X	Y	Rmks.
9204	2 534 316.126	7 363 783.398	Calc. Pt./Pt. calc
9205	2 534 313.437	7 363 794.782	Calc. Pt./Pt. calc
9206	2 534 312.512	7 363 794.563	Calc. Pt./Pt. calc
9207	2 534 315.172	7 363 783.173	Calc. Pt./Pt. calc
22507	2 534 145.924	7 363 803.334	N.B. Mon./Mon. NB (HPN Obs./Obs. HPN)
28160	2 535 354.190	7 363 188.696	N.B. Mon./Mon. NB (HPN)

Plan Of Survey/Plan d'Arpentage

Showing portion of Chipman Hill,
Montrant et des partie Hill Chipman,
City of Saint John,
Ville de Saint John,
Saint John County, New Brunswick.
Comté de Saint John, Nouveau–Brunswick.

Certified Correct/Certifié correct
HUGHES SURVEYS & CONSULTANTS INC.

Surveyed by/
Arpenté par

March 28, 2022
28 mars, 2022 Date

Marc J. Cormier # 395
New Brunswick Land Surveyor/Arpenteur–géomètre du Nouveau–Brunswick

1 : 50 (1 0 1 2 3 4 meters)

Dwg. No./No. dess.	Disk No./No. disquette	Topos	Disk No./No. disquette
S21340	2021	H21340	2021
Dwn. by/Dess. par	**Job No./No. dossier**	**Rev. No./No. de rev.**	**Map Ref./Ref. de carte**
B.E.S.	Y21–340		G/08–T2C,SW(2)

Legend/Légende

- Fence/Cloture
- Structure/Structure
- Centre Line/ ligne de centre
- Hydro Pole / Utility Wire/Poteau hydro / Fil d'utilite
- Round Iron Bar Found/Tige de fer ronde trouvee
- Calculated Co–Ordinate Point/Point de coordonnees calculees
- Standard Survey Marker Placed/Borne d'arpentage uniforme placee
- N.B. Grid Co–Ordinate Monument/Monument du reseau geodesique du N.B.
- Street Line/ Limite de rue
- Adjacent Property Line/ Limite de propriete adjacente
- Tabulated Co–Ordinate Point/Point coordonne tabule
- Utility Easement/Servitude de service
- Standard Survey Marker Found/Borne d'arpentage uniforme trouvee
- Iron Pipe Found/Tuyau trouvé
- Square Iron Bar Found/Tige de fer carree trouvee
- Traverse Control Point/Point de controle de cheminement
- Fdn. Foundation /Fondation

H:_2021\jobs\S21340\DWG\S21340.dwg Monday, March 28, 2022 11:30:34 AM

STREET CLOSING
CHIPMAN HILL

Public Notice is hereby given that the Common Council of The City of Saint John intends to consider amending "A By-law Respecting the Closing of Roads, Streets or Highways In The City of Saint John" at its regular meeting to be held on **Tuesday, April 19, 2022 at 6:30 p.m.** to permanently close the following street:

CHIPMAN HILL: All that portion of Chipman Hill, a public street in the City of Saint John, in the County of Saint John and Province of New Brunswick, comprising 11 square metres as shown on a Plan of Survey titled, "Showing portion of Chipman Hill, City of Saint John, Saint John County, New Brunswick," prepared by Hughes Surveys & Consultants Inc. and dated March 28, 2022 attached hereto.

(INSERT PLAN)

For details on how to participate in the Public Hearing, to inspect the amendment and plan, or to register to participate please contact the Office of the City Clerk at cityclerk@saintjohn.ca.

Saint John Council meetings can be viewed online at https://www.youtube.com/user/saintjohnweb

Written objections to the proposed amendment may be delivered to Mr. Jonathan Taylor, City Clerk at:

i) P.O. Box 1971, Saint John, N.B., E2L 4L1; or
ii) cityclerk@saintjohn.ca

If you require French services for a Common Council meeting, please contact the office of the City Clerk at (506) 658-2862.

FERMETURE DE RUE
HILL CHIPMAN

Par les présentes, un avis public est donné par lequel le conseil communal de la ville de Saint John indique son intention de modifier l'« Arrêté relatif à la fermeture des chemins, des rues ou des routes dans The City of Saint John » lors de la réunion ordinaire qui se tiendra **le mardi 19 avril 2022 à 18 h 30** afin d'interrompre la circulation et de fermer la route suivante :

HILL CHIPMAN: Toute la partie de la Hill Chipman, une rue publique dans la ville de Saint John, comté de Saint John, dans la province du Nouveau-Brunswick, d'une superficie d'environ 11 mètres carrés comme le montre le plan d'arpentage intitulé « Partie du plan d'arpentage indiquant la Hill Chipman ville de Saint John, comté de Saint John, province du Nouveau-Brunswick », préparé par Hughes Surveys & Consultants Inc. et daté du 28 mars 2022, joint aux présentes.

(INSÉRER LE PLAN)

Pour savoir comment participer à l'audition publique, inspecter la modification et le plan de la rue ou de vous inscrire pour participer, veuillez communiquer avec le bureau du greffier municipal à l'adresse cityclerk@saintjohn.ca.

Les réunions du Conseil de Saint John peuvent être consultées en ligne à https://www.youtube.com/user/saintjohnweb
Veuillez faire part de vos objections au projet de modification par écrit à l'attention de M. Jonathan Taylor, greffier municipal, à l'une des coordonnées suivantes :

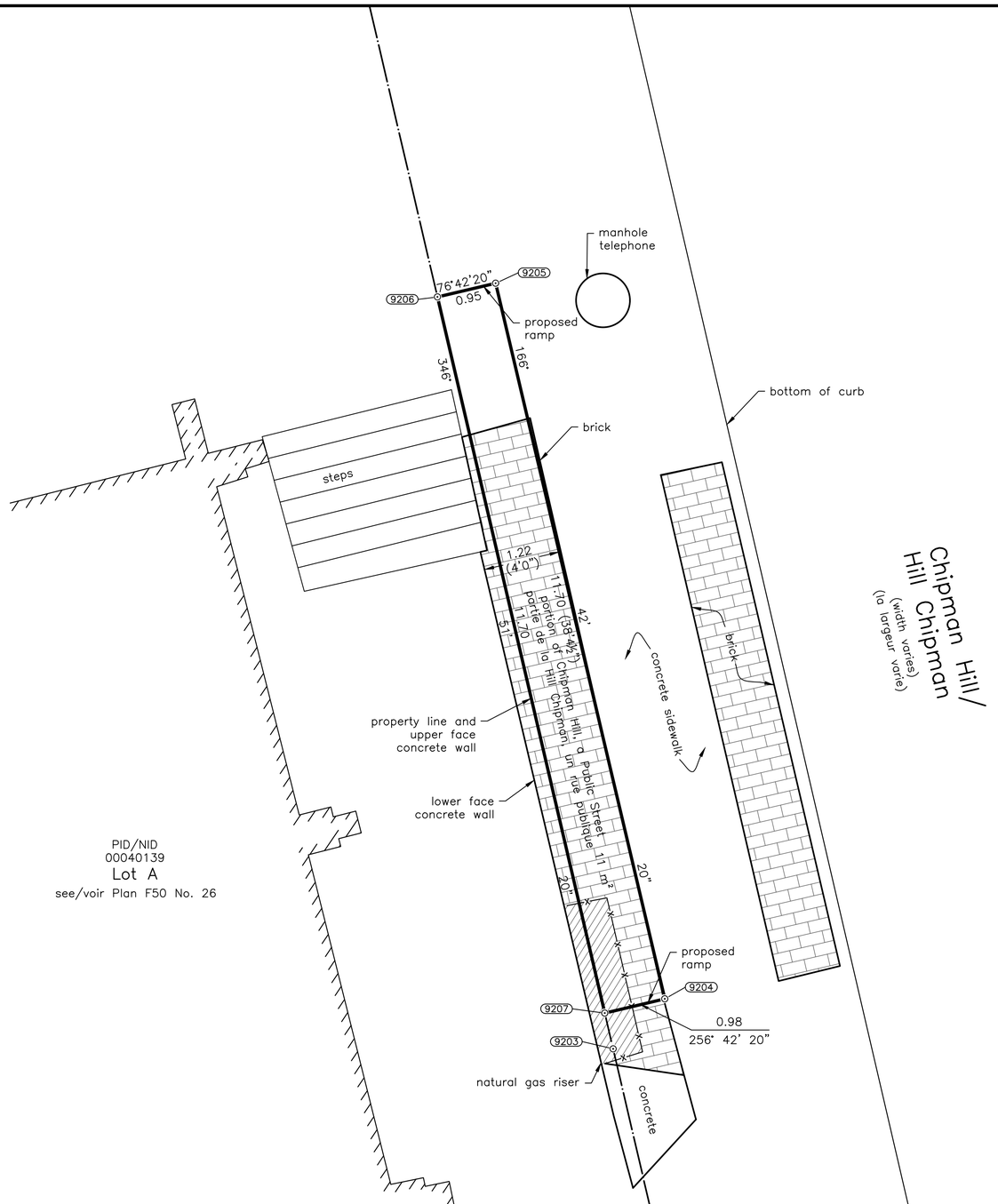
i) C.P. 1971, Saint John (N.-B.) E2L 4L1;
ii) cityclerk@saintjohn.ca.

Si vous exigez des services en français pour une réunion du conseil communal, veuillez communiquer avec le bureau du greffier municipal au (506) 658-2862.

ENDORSEMENTS

NEW BRUNSWICK LAND SURVEYOR
MARC J. CORMIER 395
ARPENTEUR-GÉOMÈTRE DU NOUVEAU-BRUNSWICK

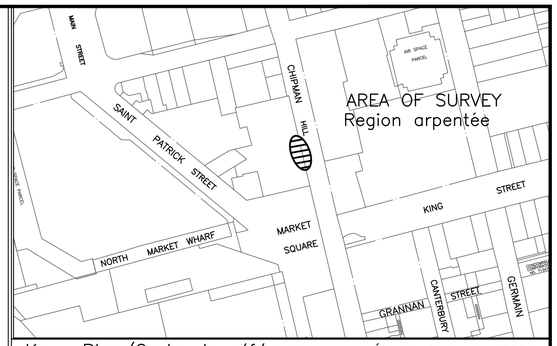
A N B L S
No. _____
A A G N B



PID/NID
00040139
Lot A
see/voir Plan F50 No. 26

Legend/Légende

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- Standard Survey Marker Placed/Borne d'arpentage uniforme placee
- N.B. Grid Co-Ordinate Monument/Monument du reseau geodesique du N.B.
- Street Line/ Limite de rue
- Adjacent Property Line/ Limite de propriete adjacente
- Tabulated Co-Ordinate Point/Point coordonne tabule
- Utility Easement/Servitude de service
- Standard Survey Marker Found/Borne d'arpentage uniforme trouvee
- Iron Pipe Found/Tuyau trouvé
- Square Iron Bar Found/Tige de fer carree trouvee
- Traverse Control Point/Point de controle de cheminement
- Fdn. Foundation /Fondation



Key Plan/Carte de référence Échelle/Scale 1 : 3000

Registration Data/Information d'enregistrement

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5) Field survey completed on Feb 23, 2022 .
5) L'arpentage sur le chantier fût complété le 23 fév., 2022.
6) All computations performed and coordinates shown on this plan are based on New Brunswick Stereographic Double Projection and the NAD83(CSRS) Ellipsoid as realized by Service New Brunswick , High Precision Network coordinate survey monuments .
6) Les calculs et les coordonnées montrés sur ce plan sont basés sur la projection stéréographique double du Nouveau-Brunswick et l'ellipsoïde NAD83(CSRS) telles que determinées par les coordonnees Réseau de grande précision des monuments de Services Nouveau-Brunswick .

New Brunswick Grid Co-Ordinate Values
Liste des coordonnées géodésiques du Nouveau-Brunswick

Sta.	X	Y	Rmks.
9204	2 534 316.126	7 363 783.398	Calc. Pt./Pt. calc
9205	2 534 313.437	7 363 794.782	Calc. Pt./Pt. calc
9206	2 534 312.512	7 363 794.563	Calc. Pt./Pt. calc
9207	2 534 315.172	7 363 783.173	Calc. Pt./Pt. calc
22507	2 534 145.924	7 363 803.334	N.B. Mon./Mon. NB (HPN Obs./Obs. HPN)
28160	2 535 354.190	7 363 188.696	N.B. Mon./Mon. NB (HPN)

Plan Of Survey/Plan d'Arpentage

Showing portion of Chipman Hill,
Montrant et des partie Hill Chipman,
City of Saint John,
Ville de Saint John,
Saint John County, New Brunswick.
Comté de Saint John, Nouveau-Brunswick.

Certified Correct/Certifié correct
HUGHES SURVEYS & CONSULTANTS INC.

Surveyed by/ Arpenté par
February 25, 2022
25 février, 2022
Marc J. Cormier # 395 Date
New Brunswick Land Surveyor/Arpenteur-géomètre du Nouveau-Brunswick

1 : 50 (1 0 1 2 3 4 meters)

Dwg. No./No. dess.	Disk No./No. disquette	Topos	Disk No./No. disquette
S21340	2021	H21340	2021

Dwn. by/Dess. par	Job No./No. dossier	Rev. No./No. de rev.	Map Ref./Ref. de carte
B.E.S.	Y21-340		G/08-T2C,SW(2)

H:\2021\Jobs\S21340\DWG\S21340.dwg Friday, March 18, 2022 9:24:15 AM



Chipman Hill Street Closure Scale/Échelle 1:1075 Date: 2022/03/30 09:37:29

0 25.0 50.0 75.0 mètres metres

While this map may not be free from error or omission, care has been taken to ensure the best possible quality. This map is a graphical representation of property boundaries which approximates the size, configuration and location of properties. It is not a survey and is not intended to be used for legal description or to calculate exact dimensions or area.

Même si cette carte n'est peut-être pas libre de toute erreur ou omission, toutes les précautions ont été prises pour en assurer la meilleure qualité possible. Cette carte est une représentation graphique approximative des terrains (limites, dimensions, configuration et emplacement). Elle n'a aucun caractère officiel et ne doit donc pas servir à la rédaction de la description officielle d'un terrain ni au calcul de ses dimensions exactes ou de sa superficie.

BY-LAW NUMBER M-16
A LAW TO AMEND A BY-LAW RESPECTING WATER AND SEWERAGE

Be it enacted by the Common Council of The City of Saint John as follows:

A By-law of The City of Saint John entitled "A By-law Respecting Water and Sewerage", enacted on the 7th day of June, A.D. 2004, is hereby amended as follows:

1 Schedule "E" is repealed and replaced with Schedule "E" attached hereto.

IN WITNESS WHEREOF The City of Saint John has caused the Corporate Common Seal of the said City to be affixed to this by-law the _____ day of _____, A.D. 2022 and signed by:

_____
Mayor / Maire

_____
City Clerk / Greffier de la municipalité

First Reading -
Second Reading -
Third Reading -

ARRÊTÉ NO M-16
ARRÊTÉ MODIFIANT L'ARRÊTÉ CONCERNANT LE RÉSEAU D'EAU ET D'ÉGOUTS

Lors d'une réunion du conseil communal, The City of Saint John a décrété ce qui suit :

Par les présentes, l'arrêté de The City of Saint John intitulé « Arrêté concernant les réseaux d'eau et d'égouts », décrété le 7 juin 2004, est modifié comme suit:

1 L'annexe « E » est abrogée et remplacée par l'annexe « E » ci-jointe.

EN FOI DE QUOI The City of Saint John a fait apposer son sceau communal sur le présent arrêté le _____ _____ 2022, avec les signatures suivantes :

Première lecture -
Deuxième lecture -
Troisième lecture -

Schedule “E”

Raw Industrial Water Customers and Rates

Raw Water Customer	**Infrastructure**	**Rate per Cubic Metre ($)**	**Rate Stabilizing Reserve**
			Bi-Monthly($)
1. New Brunswick Power	This user draws its industrial raw water through a 1500mm diameter concrete intake pipe running from Ludgate Lake across Route 1 to the Coleson Cove Screen Building located at coordinates N 7355170.56 and E 2522389.97 just off of Route 1. Once through the screen building water passes through approximately 5,000m of 600mm diameter transmission main to ultimately make its way to the Coleson Cove generating station located at 4077 King William Road.	**0.7145**	**1,329**
2. Irving Pulp and Paper Limited	This user draws its industrial raw water through a 1800mm diameter intake pipe and approximately 330m of 1800mm diameter concrete pressure pipe originating from Spruce Lake leading to the Spruce Lake Screen building. The screen building is located at coordinates N 7357823.16 and E 2525290.60 and is just to the right of the eastern shore of Spruce Lake. Once through the screen building water passes through the Spruce Lake Transmission main to ultimately make its way to the Irving Pulp and Paper Mill located at 408 Mill Road. The Spruce Lake transmission main consists of approximately 7,500 m of 1500mm diameter concrete pressure pipe owned by City of Saint John and approximately 1,000m of 1370mm diameter concrete pressure pipe owned by IPP.	**0.0704**	**45,879**
3. Irving Paper Inc.	This user draws its industrial raw water through a 1200mm diameter intake pipe originating from Latimer Lake leading to the Latimer Lake control valve chamber. Once through the control valve chamber, water passes through approximately 275m of 1500mm diameter reinforced concrete pipe to ultimately discharge into Eldersley brook. Eldersley Brook recharges the Silver Falls watershed. Irving Paper has a private intake, screen and chlorination building located at Silver falls. From there the water eventually makes its way to Irving Paper located at 435 Bayside Drive.	**0.0677**	**3,587**

4. Irving Oil Limited	Multiple raw water transmission mains deliver raw water from Latimer Lake to other transmission piping near the Lakewood Heights pump station for use by potable and industrial users. Irving Oil Limited draws its industrial raw water from two separate connections to the above mentioned transmission mains prior to their connection to the Loch Lomond Drinking Water Treatment Facility. The first raw water connection to the transmission system near the Lakewood Heights Pumping Station delivers raw water to a chamber located at Champlain Heights through approximately 2,500m of 600mm HDPE relined cast iron raw water transmission main to ultimately make its way to the Irving Oil Refinery located at 340 Loch Lomond Road. The second connection to the above transmission systems is a 600mm PVC Raw water transmission main, approximately 3,000m delivers raw water along Hickey Road to a chamber located at Champlain Heights. From there raw water is delivered through approximately 450m of 500mm raw water transmission main along Commerce Drive to ultimately make its way to the Irving Oil Refinery located at 340 Loch Lomond Road.	**0.2755**	**25,067**

Notes:

a) **At between approximately 3 to 5 year intervals, the city will undertake industrial raw water rate studies for purposes of reassessing rates and rate structures.**

b) **Rate Stabilizing Reserve will be reviewed annually as part of the yearly rate setting exercise with the intent of holding approximately 7 months of operating costs in the rate stabilizing reserve at any given time.**

Annexe « E »

Clients et tarifs de l’eau industrielle brute

Client d’eau brute	**Infrastructure**	**Taux au mètre cube ($)**	**La réserve de stabilisation des tarifs**
			Tari bimensuel($)
1. Énergie Nouveau-Brunswick	Cet utilisateur puise son eau brute industrielle dans un tuyau de prise d’eau en béton de 1 500 mm de diamètre qui, traversant la route 1, va du lac Ludgate au bâtiment de dégrillage de Coleson Cove situé aux coordonnées N 7355170.56 et E 2522389.97, à proximité de la route 1. Une fois sortie du bâtiment de dégrillage, l’eau circule dans environ 5 000 m de conduite principale de 600 mm de diamètre pour finalement se rendre à la centrale de Coleson Cove, située au 4077, chemin King William.	**0,7145**	**1,329**
2. Irving Pulp and Paper Limited	Cet utilisateur puise son eau brute industrielle dans un tuyau de prise d’eau de 1 800 mm de diamètre vers un tuyau sous pression en béton de 1 800 mm de diamètre d’une longueur de 330 m environ provenant du lac Spruce et menant au bâtiment de dégrillage du lac Spruce. Le bâtiment de dégrillage est situé aux coordonnées N 7357823.16 et E 2525290.60, juste à droite de la rive est du lac Spruce. Une fois sortie du bâtiment de dégrillage, l’eau passe par la conduite principale du réseau de transport du lac Spruce pour finalement se rendre à l’usine de pâtes et papiers Irving située au 408, chemin Mill. La conduite principale de transport du lac Spruce est composée d’environ 7 500 m de conduite sous pression en béton de 1 500 mm de diamètre appartenant à la ville de Saint John et d’environ 1 000 m de conduite sous pression en béton de 1 370 mm de diamètre appartenant à IPP.	**0,0704**	**45,879**
3. Irving Paper Inc.	Cet utilisateur puise son eau brute industrielle dans un tuyau de prise d’eau de 1 200 mm de diamètre provenant du lac Latimer et menant à la chambre de vannes de régulation du lac Latimer. Une fois sortie de la chambre de vannes de régulation, l’eau circule dans environ 275 m de tuyau en béton armé de 1 500 mm de diamètre pour finalement s’écouler dans le ruisseau Eldersley. Le ruisseau Eldersley recharge le bassin versant de Silver Falls. Irving Paper possède un bâtiment privé de prise d’eau, de dégrillage et de chloration situé à Silver Falls. De là, l’eau se rend éventuellement à l’usine d’Irving Paper, située au 435 promenade Bayside.	**0,0677**	**3,587**

4. Irving Oil Limited	De multiples conduites principales de transport d'eau brute acheminent l'eau brute du lac Latimer à d'autres conduites de transport situées près de la station de pompage de Lakewood Heights pour être utilisées par des utilisateurs d'eau potable et industrielle. Irving Oil Limited tire son eau brute industrielle de deux raccordements distincts aux conduites de transport susmentionnées avant leur raccordement à l'usine de traitement de l'eau potable de Loch Lomond. Le premier raccordement d'eau brute au réseau de transport près de la station de pompage de Lakewood Heights achemine l'eau brute à une chambre située à Champlain Heights par l'intermédiaire d'environ 2 500 m de conduite de 600 mm en fonte revêtue de PEHD pour finalement se rendre à la raffinerie Irving Oil située au 340 chemin Loch Lomond. Le deuxième raccordement aux systèmes de transport ci-dessus est une conduite d'eau brute en PVC de 600 mm, d'une longueur d'environ 3 000 m, qui achemine l'eau brute le long du chemin Hickey vers une chambre située à Champlain Heights. De là, l'eau brute est acheminée par une conduite principale de transport d'environ 450 m d'un diamètre de 500 mm le long de la promenade Commerce jusqu'à la raffinerie Irving Oil située au 340, chemin Loch Lomond.	**0,2755**	**25,067**

Notes :

a) **Tous les trois à cinq ans environ, la Ville entreprend des études sur les tarifs de l'eau brute industrielle afin de réévaluer les tarifs et les structures tarifaires.**

b) **La réserve de stabilisation des tarifs fait l'objet d'un examen annuel dans le cadre de l'exercice annuel d'établissement des tarifs, l'intention étant de conserver environ sept mois de frais d'exploitation dans la réserve de stabilisation des tarifs en tout temps.**

Staff Recommendation for Council Resolution

Property: 35 Margaret Street

Public Hearing held April 4, 2022

Item	Required: (Y/N)	Recommendation
Municipal Plan Amendment	No	N/A
Zoning By-Law Amendment	Yes	That Common Council rezone land having an area of approximately 488 m2, located at 35 Margaret Street, also identified as portions of PID Number 00316950, from Two-Unit Residential (R2) to Low-Rise Residential (RL).
Other	Yes	That Common Council withhold third reading and adoption of the proposed rezoning is not given until the applicant submits a building permit application illustrating the necessary improvements to meet the 2015 National Building Code to the satisfaction of the City's Building Inspector.

3rd Reading

3rd Reading: April 19, 2022

Item:	Required: (Y/N)	Recommendation
Municipal Plan Amendment	N	N/A
Zoning By-Law Amendment	Yes	That Common Council rezone land having an area of approximately 488 m2, located at 35 Margaret Street, also identified as portions of PID Number 00316950, from Two-Unit Residential (R2) to Low-Rise Residential (RL).
Recission of Previous s. 39/s. 59 Conditions	No	N/A

Section 59 Conditions	Yes	That Common Council, pursuant to the provisions of Section 59 of the Community Planning Act, impose the following condition on the parcel of land having an area of approximately 488 m2, located at 35 Margaret Street, also identified as PID Number 00316950: a) The building is limited to a maximum of four dwelling units.
Section 59 Agreement	No	N/A
Section 131 Agreement	No	N/A
Other	No	

BY-LAW NUMBER C.P. 111-134
A LAW TO AMEND THE ZONING BY-LAW OF THE CITY OF SAINT JOHN

Be it enacted by The City of Saint John in Common Council convened, as follows:

The Zoning By-law of The City of Saint John enacted on the fifteenth day of December, A.D. 2014, is amended by:

1. Amending Schedule “A”, the Zoning Map of the The City of saint John, by rezoning a parcel of land having an area of approximately 488 m2, located at 35 Margaret Street, also identified as portions of PID Number 00316950, from Two-Unit Residential (R2) to Low-Rise Residential (RL) pursuant to a resolution adopted by Common Council under Section 59 of the Community Planning Act.

- all as shown on the plan attached hereto and forming part of this by-law.

IN WITNESS WHEREOF The City of Saint John has caused the Corporate Common Seal of the said City to be affixed to this by-law the X day of X, A.D. 2022 and signed by:

ARRÊTÉ NO C.P. 111-134
ARRÊTÉ MODIFIANT L’ARRÊTÉ DE ZONAGE DE THE CITY OF SAINT JOHN

Lors d'une réunion du conseil communal, The City of Saint John a décrété ce qui suit :

L'arrêté sur le zonage de The City of Saint John, décrété le quinze (15) décembre 2014, est modifié par :

1. La modification de l'annexe «A», Plan de zonage de la ville de Saint John permettant de modifier la désignation d’une parcelle de terrain d’une superficie d’environ 488 mètres carrés, située au 35, rue Margaret, également identifié de NID 00316950, de Zone résidentielle bifamiliale (R2) à Zone résidentielle – Immeubles d’habitation bas (RL) conformément à une résolution adoptée par le conseil municipal en vertu de l’article 59 de la Loi sur l’urbanisme.

- toutes les modifications sont indiquées sur le plan ci-joint et font partie du présent arrêté.

EN FOI DE QUOI, The City of Saint John a fait apposer son sceau communal sur le présent arrêté le X 2022, avec les signatures suivantes :

_____
Mayor/Maire

_____
City Clerk/Greffier communal

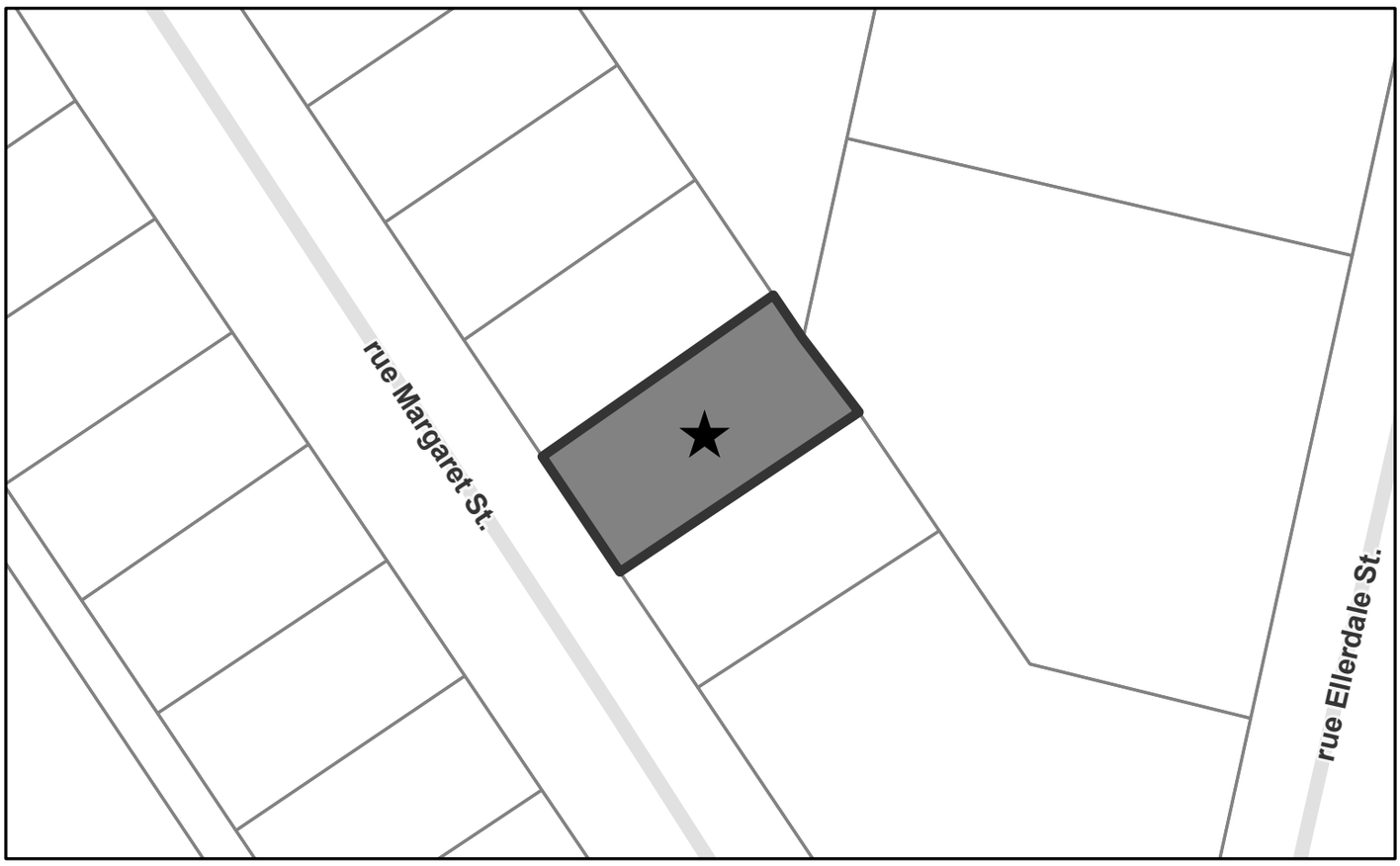
First Reading - April 4, 2022
Second Reading - April 4, 2022
Third Reading -

Première lecture - le 4 avril 2022
Deuxième lecture - le 4 avril 2022
Troisième lecture -

GROWTH & COMMUNITY DEVELOPMENT SERVICES
SERVICE DE LA CROISSANCE ET DU DÉVELOPPEMENT COMMUNAUTAIRE

REZONING / REZONAGE

Amending Schedule “A” of the Zoning By-Law of The City of Saint John
Modifiant Annexe «A» de l’Arrêté de zonage de The City of Saint John



FROM / DE		**TO / À**
Two-Unit Residential Zone résidentielle bifamiliale	**R2** ▭ **RL**	Low-Rise Residential Zone résidentielle - immeubles d'habitation bas

★ Pursuant to a Resolution under Section 59 of the Community Planning Act
Conformément à une resolution adoptée par le conseil municipal en vertu de l'article 59 de la Loi sur l'urbanisme

Applicant: Alan Goebel

Location: 35 Margaret Street

PID(s)/NIP(s): 00316950

Considered by P.A.C./Considéré par le C.C.U.: March 15 mars, 2022

Enacted by Council/Approuvé par le Conseil:

Filed in Registry Office/Enregistré le:

By-Law #/Arrêté #:

Drawn by/Créée par: Andrew Pollock **Date drawn/Carte créée:** April 11 avril, 2022

COMMON COUNCIL REPORT

M&C No.	2022-122
Report Date	April 13, 2022
Meeting Date	April 19, 2022
Service Area	Public Works and Transportation Services

Her Worship Mayor Donna Noade Reardon and Members of Common Council

SUBJECT: **Ride Sharing By-Law**

AUTHORIZATION

Primary Author	Commissioner/Dept. Head	City Manager
Michael Hugenholtz	***Michael Hugenholtz***	***John Collin***

RECOMMENDATION

That Common Council give 1st and 2nd readings to A By-law Respecting the Regulation of Ridesharing Companies in The City of Saint John, By-law Number L.G.- 18, in the form attached to M&C 2022-122

EXECUTIVE SUMMARY

The Provincial government made amendments to the Motor Vehicle Act in 2020 to allow for ridesharing companies to offer services where municipalities have enacted a governing by-law. Input was sought from the public which indicated overwhelming support for the introduction of ridesharing services in our community. Staff have included a draft by-law for Council's consideration.

PREVIOUS RESOLUTION

January 25, 2021, Council passed the following resolution:

RESOLVED that Common Council direct the City Manager to present for consideration a draft by-law regulating ride-sharing services in the City of Saint John to have a third reading completed in 2021.

REPORT

Ridesharing is a service that uses a mobile application to match passengers needing a ride with a vehicle owner. These services have become a popular transportation option for many years in larger communities, with the most recognized companies being Uber and Lyft.

In conjunction with the requirements of the *Motor Vehicle Act*, local by-laws set out requirements for ridesharing companies including driver requirements,

vehicle requirements, technology platform requirements and licensing. In preparing the attached by-law staff have undertaken a review of several ridesharing by-laws from around the province and across the country. To ensure a level playing field with the taxi industry staff have proposed a maximum vehicle age of 8 years. It should be noted however that apart from notable exceptions in Toronto and parts of British Columbia the minimum vehicle age in many similar by-laws is set at 10.

There are other potential barriers to the entry of ridesharing companies into our Province or our region, namely regional consistency. As the rules stand currently, ridesharing companies in our region would not be able to offer service either within or between our regional municipalities without a similar by-law being enacted in those jurisdictions. The process of licensing would also have to be streamlined to minimize the administrative burden for companies seeking to set up in our area. Staff have reached out to the outlying municipalities and asked them to consider enacting a similar by-law.

It is possible that there will be further adjustments required to this by-law in future to ensure conditions are favourable for companies to offer services in our region.

STRATEGIC ALIGNMENT

Move: the importance of this link speaks to the need to offer safe, accessible travel options for the movement of people.

SERVICE AND FINANCIAL OUTCOMES

N/A

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

Public Consultation

The project team used the “Shape Your City Saint John” online engagement platform to gather public input to inform the development of the draft by-law. In addition to project information, an FAQ, and links, a survey soliciting public feedback ran from March 24 until April 6, 2022. Users could also submit comments to the project team via email.

The survey was advertised via social media and the City’s email notification system. Local media carried links and information. The City’s Taxi Inspector hand delivered written information to local taxi companies.

One hundred registrants responded to the survey. The majority of respondents (81%) have used ridesharing services in other municipalities. Of those who responded to the follow up question about their experience, comments were

generally favourable. Of the 99 respondents to the question “Would you use ridesharing if it were available in Saint John?,” 88.9% responded “yes.” Respondents in favour of ridesharing cited convenience, choice, safety and affordability of the service as factors. Those who responded negatively cited adverse effects on public transportation, the local taxi industry and income for rideshare drivers as concerns.

The full engagement summary is appended to this report.

Envision Saint John

Envision Saint John is supportive of the adoption of ridesharing by-laws as one way to offer competitive transportation options for residents and visitors to our region. They have sent a letter of support to the Mayors and CAO’s of our regional municipalities which is attached to this report.

ATTACHMENTS

By-Law L.G. -18 A ByLaw Respecting the Regulation of Ridesharing Companies
Summary of Public Input
Letter of Support from Envision Saint John

THE CITY OF SAINT JOHN
NEW BRUNSWICK

A By-law Respecting the Regulation of Ridesharing Companies in The City of Saint John

Arrêté relatif à la réglementation des sociétés de covoiturage dans The City of Saint John

By-law Number LG-18

Arrêté numéro LG-18

An uncertified copy of this by-law is available online

Une copie non certifiée de l'arrêté est disponible en ligne

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RECITALS

WHEREAS The City of Saint John deems it advisable to pass this by-law because it will establish standards to regulate, control, and collect fees for the licensing of ridesharing companies;

AND WHEREAS paragraph 10(1)(g) of the *Local Governance Act*, S.N.B. 2017, c. 18, authorizes a local government to enact by-laws respecting transport and transportation systems, including carriers of persons or goods, taxis and other forms of public transportation;

AND WHEREAS section 1 of the *Motor Vehicle Act*, R.S.N.B. 1973, c. M-17, defines a Vehicle-for-Hire Company and a Vehicle-for-Hire Service;

AND WHEREAS section 197.1 of the *Motor Vehicle Act* restricts a Vehicle-for-Hire Company from carrying on business or facilitating the offer of Vehicle-for-Hire Services within the territorial limits of a local government unless authorized to do so by the local government;

AND WHEREAS section 147 of the *Local Governance Act*, states that a local government may, by by-law, provide that a person who violates or fails to comply with any provision of a by-law commits an offence;

AND WHEREAS subsection 156(1) of the *Local Governance Act*, states that a local government may require administrative penalties to be paid in respect of a contravention of a provision of a by-law of the local government;

NOW THEREFORE the Common Council of The City of Saint John, enacts as follows:

Title

1 This By-law may be cited as the *Saint John Ridesharing By-Law* (hereinafter the “By-law”).

PRÉAMBULE

ATTENDU QUE la Municipalité de Saint John juge opportun de prendre le présent arrêté destiné à réglementer, contrôler et percevoir des frais pour l'octroi de permis aux sociétés de covoiturage dans la Municipalité de Saint John;

ET ATTENDU QUE l'alinéa 10(1)g) de la *Loi sur la gouvernance locale*, L.N.-B. 2017, ch. 18, autorise un gouvernement local à prendre des arrêtés concernant le transport et les moyens de transport, y compris les transporteurs de personnes ou de marchandises, les taxis et les autres formes de transport public;

ET ATTENDU QUE l'article 1 de la *Loi sur les véhicules à moteur*, L.R.N.-B. 1973, ch. M-17, définie une Société de voiturage et un Voiturage;

ET ATTENDU QUE l’article 197.1 de la *Loi sur les véhicules à moteur* limite une Société de voiturage d’exercer ses activités ou de faciliter l’offre du Voiturage dans les limites géographiques d’un gouvernement local, à moins d’y être autorisée par celui-ci;

ET ATTENDU QUE l’article 147 de la *Loi sur la gouvernance locale*, prévoit que, par voie d’arrêté, un gouvernement local peut prévoir que commet une infraction quiconque contrevient ou omet de se conformer à quelque disposition que ce soit d’un arrêté;

ET ATTENDU QUE le paragraphe 156(1) de la *Loi sur la gouvernance locale*, prévoit qu’un gouvernement local peut exiger le paiement de pénalités administratives relativement à toute contravention à une disposition d’un arrêté du gouvernement local;

À CES CAUSES le Conseil communal de la Municipalité de Saint John édicte :

Titre

1 Le présent arrêté peut être cité sous le titre *Arrêté concernant le covoiturage à Saint John* (ci-après l’ « Arrêté »).

Definitions

2(1) The words defined in section 1 of the *Motor Vehicle Act*, when used in this By-law, shall have the same meaning as the said Act.

2(2) The following definitions apply in this By-law:

"By-Law Enforcement Officer" means a by-law enforcement officer appointed pursuant to section 72 of the *Local Governance Act*, and designated by resolution by Common Council (A*gent chargé de l'exécution des arrêtés*);

"Common Council" means the elected municipal council of the City (C*onseil communal*);

"City" means The City of Saint John and includes the geographic bounds of The City of Saint John (*Municipalité*);

"Driver" means an individual who, in affiliation with a Vehicle-For-Hire Company, transports Passengers in a Ridesharing Vehicle (C*onducteur*);

"Driver Identification Card" means and includes a physical or electronic form approved by the City containing the following information:

(a) The first and last name and photograph of the Driver;

Définitions

2(1) Lorsqu'ils sont utilisés dans le présent Arrêté, les termes définis à l'article 1 de la *Loi sur les véhicules à moteur* ont le sens qui leur est donné dans cette loi.

2(2) Les définitions qui suivent s'appliquent au présent Arrêté :

« Agent chargé de l'exécution des arrêtés » désigne un agent chargé de l'exécution des arrêtés nommé conformément à l'article 72 de la *Loi sur la gouvernance locale*, et désigné par résolution du Conseil communal (*By-law Enforcement Officer*);

« Carte d'identification de conducteur » désigne et inclut un formulaire physique ou électronique approuvé par la Municipalité contenant les renseignements suivants :

a) Les nom et prénom ainsi qu'une photographie du Conducteur;

b) La marque, le modèle et le numéro de plaque d'immatriculation du Véhicule de covoiturage utilisée par le Conducteur; et

c) Le nom et les coordonnées de la Société de voiturage (*Driver Identification Card*);

« Conducteur » désigne un individu qui, en collaboration avec une Société de voiturage, transporte des Passagers dans un Véhicule de covoiturage (*Driver*);

« Conseil communal » désigne les membres élus du conseil municipal de la Municipalité (*Common Council*);

« Identification de véhicule de covoiturage » désigne un autocollant, un voyant de véhicule, ou autre identifiant, dans un format approuvé par la Municipalité de Saint John, contenant le nom et/ou le logo d'une Société de voiturage (*Ridesharing Vehicle Identifier*);

(b) The make, model and license plate number of the Ridesharing Vehicle operated by the Driver; and

(c) The name and contact information of the Vehicle-for-Hire Company *(Carte d'identification de conducteur*);

"Insurance Act" means the *Insurance Act*, R.S.N.B. 1973, c. I-12, and amendments thereto (*Loi sur les assurances*).

"License" means a Ridesharing Company License issued under section 4 of this By-law *(Permis*);

"Motor Vehicle Act" means the *Motor Vehicle Act*, R.S.N.B. 1973, c. M-17, and amendments thereto (*Loi sur les véhicules à moteur*);

"Passenger" means an individual transported by a Driver in a Ridesharing Vehicle in affiliation with a Vehicle-for-Hire Company (*Passager*);

"Private Passenger Vehicle" means a motor vehicle designed and used primarily for the transportation of persons without remuneration and does not include a bus or taxicab (*Voiture particulière*);

"Ride" means the transportation of one or more Passengers in a Ridesharing Vehicle from the pick-up location to the drop-off location (*Trajet*);

"Ridesharing Vehicle" means a Private Passenger Vehicle affiliated with a Vehicle-for-Hire Company used to provide a Vehicle-for-Hire Services (*Véhicule de covoiturage*);

"Ridesharing Vehicle Identifier" means a decal, vehicle light, or other identifier, in a form approved by The City of Saint John, which displays the name and/or logo of a Vehicle-For-Hire Company (*Identification du véhicule de covoiturage*);

« Loi sur l'assurance » désigne la *Loi sur l'assurance,* L.R.N-B 1973, ch. I-12 et les modifications afférentes (*Insurance Act)*;

« Loi sur les véhicules à moteur » désigne la *Loi sur les véhicules à moteur,* L.R.N-B 1973, ch. M-17 et les modifications afférentes (*Motor Vehicle Act)*;

« Municipalité » désigne The City of Saint John et inclut les limites géographiques de la Municipalité de Saint John (*City*);

« Passager » désigne un individu transporté pas un Conducteur dans un Véhicule de covoiturage en collaboration avec une Société de voiturage (*Passenger)*;

« Permis » désigne un Permis de Société de voiturage délivré sous l'article 4 du présent Arrêté (*License)*;

« Plateforme technologique » inclut les logiciels électroniques, téléphones cellulaires ou autres services technologiques utilisés par les Passagers pour obtenir un transport auprès d'un Voiturage ou d'une Société de voiturage (*Technology Platform*);

« Société de voiturage » s'entend d'une personne ou société qui utilise ou offre une Plateforme technologique pour faciliter l'offre du Voiturage (*Vehicle-for-Hire Company)*;

« Trajet » désigne le transport d'un ou plusieurs Passagers dans un Véhicule de covoiturage du lieu de ramassage au lieu de déchargement (*Ride*);

"Technology Platform" includes any electronic-based software, cellphone, or other technological service which permits Passengers to obtain transportation from a Vehicle-for-Hire Service or Vehicle-for-Hire Company (*Plateforme technologique*);

"Vehicle-for-Hire Company" means a person or company who uses or offers a Technology Platform to facilitate the offer of Vehicle-for-Hire Services (*Société de voiturage*);

"Vehicle-for-Hire Service" means a service consisting of the prearranged transportation of Passengers for compensation offered by a Driver of a Ridesharing Vehicle through a Vehicle-for-Hire Company within the City of Saint John, but does not include any:

(a) "Vehicle for Hire" that is already regulated by the *Vehicle-For-Hire By-law* of The City of Saint John; or

(b) Bus transportation service or business (*Voiturage*);

« Véhicule de covoiturage » désigne une Voiture particulière affiliée à une Société de voiturage utilisée pour fournir le Voiturage (*Ridesharing Vehicle*);

« Voiturage » s'entend du service de transport pré-arrangé de passagers moyennant rémunération qu'offre le Conducteur d'un Véhicule de covoiturage par l'intermédiaire d'une Société de voiturage dans la Municipalité de Saint John, mais n'inclut pas :

a) « Véhicule de location » qui est déjà réglementé par l'*Arrêté de Saint John réglementant les véhicules de location* de la Municipalité de Saint John; ou

b) Les services ou entreprise de transport par autobus (*Vehicle-for-Hire Service*);

« Voiture particulière » désigne un véhicule à moteur conçu et utilisé principalement pour le transport gratuit de personnes et ne comprend pas un autobus ni un taxi (*Private Passenger Vehicle*);

Interpretation

3 Rules for interpretation of the language used in this By-law are contained in the lettered paragraphs as follows:

(a) The captions, article and section names and numbers appearing in this By-law are for convenience of reference only and have no effect on its interpretation.

(b) This By-law is to be read with all changes of gender or number required by the context.

Interprétation

3 Les règles d'interprétation suivantes s'appliquent au présent Arrêté :

a) Les titres, intertitres et numéros des dispositions ne servent qu'à faciliter la consultation de l'Arrêté et ne doivent pas servir à son interprétation.

b) Le genre ou le nombre grammaticaux doivent être adaptés au contexte.

(c) Each reference to legislation in this By-law is printed in Italic font. The reference is intended to include all applicable amendments to the legislation, including successor legislation. Where this By-law references other by-laws of the City, the term is intended to include all applicable amendments to those by-laws, including successor by-laws.

(d) The requirements of this By-law are in addition to any requirements contained in any other applicable by-laws of the City or applicable provincial or federal statutes or regulations.

(e) If any section, subsection, part or parts or provision of this By-law, is for any reason declared by a court or tribunal of competent jurisdiction to be invalid, the ruling shall not affect the validity of the By-law as a whole, nor any other part of it.

(f) The Schedules attached to this By-law are included in and shall be considered part of this By-law.

c) Les renvois législatifs paraissent en italique. Le renvoi à une loi vise également les modifications qui s'y appliquent, y compris toute législation de remplacement. Les renvois à d'autres arrêtés de la municipalité visent également les modifications qui s'y appliquent, y compris tout arrêté de remplacement.

d) Les obligations crées par le présent Arrêté s'ajoutent à celles découlant d'autres arrêtés applicables de la municipalité ou des lois ou règlements fédéraux ou provinciaux applicables.

e) Si une disposition quelconque est déclarée invalide par un tribunal compétent pour quelque motif que ce soit, la décision n'entache en rien la validité de l'Arrêté dans son ensemble ni de toute autre disposition.

f) Les annexes jointes au présent Arrêté sont incluses et doivent être considérées comme faisant partie du présent Arrêté.

Vehicle-for-Hire Company License

4(1) Every person who wishes to operate a Vehicle-for-Hire Company in the City shall apply for a Vehicle-for-Hire Company License under this By-law.

4(2) When applying for a License, an applicant shall submit the form attached as Schedule "A" hereto and provide the following information

(a) The data security measures that the applicant has in place to protect the personal information of Drivers and Passengers affiliated with the Vehicle-for-Hire Company

(b) Proof of the insurance requirement as required by this By-law.

Permis de société de voiturage

4(1) Toute personne qui souhaite exploiter une Société de voiturage dans la Municipalité doit demander un Permis de Société de voiturage conformément au présent Arrêté.

4(2) Pour toute demande de Permis de Société de voiturage, le demandeur doit remettre le formulaire joint en Annexe « A » et fournir les renseignements suivants :

a) Les mesures de sécurité des données que le demandeur a mis en place pour protéger les renseignements personnels des Conducteurs et des Passagers affiliés à la Société de voiturage;

b) La preuve d'assurance requise en vertu du présent Arrêté;

(c) The number of Ridesharing Vehicles offering Vehicle-for-Hire Service affiliated with the applicant in the City;

(d) Payment of all applicable fees required under this By-law, including:

(i) The basic licensing amount; and

(ii) All fees based on the number of Rides provided per month.

4(3) The categories of Vehicle-for-Hire Companies shall be:

(a) Class A: one hundred vehicles or more (100+);

(b) Class B: twenty-five (25) to ninety-ninety (99) vehicles; and

(c) Class C: one (1) to twenty-four (24) vehicles.

4(4) Upon the initial application for a License under this By-law, an applicant shall pay the following fees to the City:

(a) Class A - $7,253.00

(b) Class B - $2,469.00

(c) Class C - $807.00

4(5) For renewal of License, the applicant shall pay the following fees to the City:

(a) Class A - $7,253.00 + $0.20/Ride from January 1 to December 31 in the previous year.

(b) Class B - $2,469.00 + $0.20/Ride from January 1 to December 31 in the previous year.

c) Le nombre de Véhicules de covoiturage affiliés au demandeur dans la Municipalité;

d) Le paiement de tous les frais applicables requis conformément au présent Arrêté, notamment :

i) Le montant du permis de base; et

ii) L'ensemble des frais basés sur le nombre de Trajets effectués par mois.

4(3) Les différentes catégories de Société de voiturage sont les suivantes:

a) Classe A : cent véhicules ou plus (100+);

b) Classe B : vingt-cinq (25) à quatre-vingt-dix-neuf (99) véhicules; et

c) Classe C : un (1) à vingt-quatre (24) véhicules.

4(4) Lors de sa demande initiale de licence d'exploitation de Société de voiturage conformément au présent Arrêté, le demandeur doit payer les frais suivants à la Ville :

a) Classe A - 7 253 $

b) Classe B - 2 469 $

c) Classe C - 807 $

4(5) Pour une demande de renouvellement de Permis de Société de voiturage, le demandeur doit payer les frais suivants à la Municipalité :

a) Classe A - 7 253 $ + 0,20 $/Trajet du 1 janvier au 31 décembre de l'année précédente.

b) Classe B - 2 469 $ + 0,20 $/Trajet du 1 janvier au 31 décembre de l'année précédente.

c) Classe C - 807 $ + 0,20 $/Trajet du 1 janvier au 31 décembre de l'année précédente.

(c) Class C - $807.00 + $0.20/Ride from January 1 to December 31 in the previous year.

4(6) No person shall carry on a Vehicle-for-Hire Company within the City unless they hold a current License issued pursuant to this By-law.

4(6) Toute personne qui souhaite exploiter une Société de voiturage dans la Municipalité doit détenir un Permis délivré conformément au présent Arrêté.

4(7) Every License issued under this By-law shall expire one (1) year after first being issued.

4(7) Tout Permis délivré en vertu du présent Arrêté expire un (1) an après avoir été délivré.

Vehicle-for-Hire Company Licensees – Prohibitions

5 No Vehicle-for-Hire Company shall:

(a) Breach any applicable prohibition or obligations of License holders under this By-law; or

(b) Permit any of its Drivers to breach any prohibition or obligation of Drivers under this By-law.

Société de voiturage titulaires d'un permis – Interdictions

5 Les Sociétés de voiturage ne peuvent :

a) Enfreindre les interdictions ou obligations applicables des titulaires de Permis conformément au présent Arrêté; ou

b) Autoriser l'un de ses Conducteurs à enfreindre les interdictions ou obligations des Conducteurs conformément au présent Arrêté.

Vehicle-for-Hire Company Licensees – Obligations

6(1) Every Vehicle-for-Hire Company licensee shall have a Technology Platform.

6(2) The Technology Platform shall:

(a) At the time when transportation is being arranged, provide the Passenger requesting the transportation:

(i) The name and contact information of the Vehicle-for-Hire Company licensee;

(ii) The first name and photograph of the Driver who will provide the Ride;

(iii) The make, model, and license plate number of the Ridesharing Vehicle that will provide the Ride;

Société de voiturage titulaires d'un permis – Obligations

6(1) Chaque titulaire d'un Permis de Société de voiturage doit disposer d'une Plateforme technologique.

6(2) La Plateforme technologique doit:

a) Au moment où le transport est organisé, fournir à la personne qui demande le transport :

i) Le nom et les coordonnées du titulaire du Permis de Société de voiturage;

ii) Le prénom ainsi qu'une photographie du Conducteur chargé du Trajet;

iii) La marque, le modèle et le numéro de plaque d'immatriculation du Véhicule de covoiturage utilisé pour les Trajets en question;

(iv) Any special surcharge that will be applicable for the Ride;

(v) An estimate of the total cost of the Ride; and

(vi) The current location of the Ridesharing Vehicle.

(b) Permit a Passenger to accept or refuse arranged transportation before it begins and to record such acceptance or refusal;

(c) Provide a secure payment mechanism that is compliant with Payment Card Industry Security Standards Council standards and guidelines;

(d) Provide a printed or electronic receipt to the Passenger at the end of the Ride that includes the information confirming:

(i) Fare rate and surcharges;

(ii) Total amount paid;

(iii) Date and time of pickup;

(iv) Location where the Passenger was picked up and dropped off; and

(v) First name of the Driver.

(e) Provide a link where the Passenger may rate or provide comments upon the Vehicle-for-Hire Service or the Driver.

6(3) Every Vehicle-for-Hire Company licensee shall make available to the public on its Technology Platform, and by any other means of its choice, the following information:

(a) The insurance coverage required to be maintained by the Vehicle-for-Hire Company and by each Driver;

iv) Tout supplément spécifique applicable au Trajet;

v) Une estimation du coût total du Trajet; et

vi) L'emplacement actuel du Véhicule de covoiturage.

b) Permettre à une personne d'accepter ou de refuser un transport organisé avant qu'il ne commence et enregistrer l'acceptation ou le refus en question;

c) Fournir un mécanisme de paiement sécurisé conforme aux normes et directives du Conseil des normes de sécurité de l'industrie des cartes de paiement;

d) Fournier un reçu imprimé ou électronique au Passager à la fin du Trajet, incluant les renseignements confirmant :

i) Le tarif et/ou les suppléments;

ii) Le montant total payé;

iii) La date et l'heure de ramassage;

iv) Le lieu de ramassage et de débarquement du Passager; et

v) Le prénom du Conducteur.

e) Fournir un lien permettant au Passager de soumettre une évaluation et de publier des commentaires sur le Véhicule de covoiturage ou le Conducteur.

6(3) Chaque titulaire d'un Permis de Société de voiturage doit mettre à disposition du public sur sa Plateforme technologique, et par tout autre moyen de son choix, les renseignements suivants :

a) L'assurance obligatoire que ce titulaire et chaque Conducteur doivent détenir;

(b) The applicable screening process for Drivers and Ridesharing Vehicles;

(c) That Drivers may only provide Vehicle-for-Hire Service that are prearranged using the Technology Platform of the Vehicle-for-Hire Company and cannot accept Passengers by any other means, including street hails or taxicab stands; and

(d) That Drivers cannot accept cash payment for Rides.

6(4) Every License holder shall issue a Driver Identification Card to each of its Drivers.

6(5) Every License holder shall issue a current Ridesharing Vehicle Identifier to each of its Drivers.

6(6) Every License holder shall keep, in electronic format, a current list of all Drivers and Ridesharing Vehicles being used in Vehicle-for-Hire Service, which shall include:

(a) The full name, address, and telephone number of each Driver;

(b) The make, model, and license plate number of each Ridesharing Vehicle being used in Vehicle-for-Hire Service; and

(c) The Ridesharing Vehicle Identifier.

Drivers

7(1) License holders shall ensure that each Driver offering Vehicle-For-Hire Service meets the following requirements:

(a) Is at least 19 years of age;

(b) Has been issued a valid driver's license for the operation of a motor vehicle for the current year pursuant to the *Motor Vehicle Act* and regulations thereunder, and

b) Le processus de sélection applicable des Conducteurs et Véhicules de covoiturage;

c) Que les Conducteurs ne peuvent fournir que des services de transport planifiés au préalable en utilisant la Plateforme technologique du titulaire du Permis de Société de voiturage, et qu'ils ne peuvent accepter d'auto-stopper ni prendre de Passagers aux arrêts pour taxis; et

d) Que les Conducteurs ne peuvent accepter de paiement espèces pour des Trajets.

6(4) Le titulaire d'un Permis doit remettre une Carte d'identification de conducteur à chacun de ses Conducteurs.

6(5) Le titulaire d'un Permis doit remettre une Identification de véhicule de covoiturage à chacun de ses Conducteurs.

6(6) Chaque titulaire d'un Permis doit conserver, en format électronique, une liste mise à jour de tous ses Conducteurs et Véhicules de covoiturage utilisés dans le cadre du Voiturage, qui doit inclure :

a) Le nom complet, l'adresse et le numéro de téléphone de chaque Conducteur;

b) La marque, le modèle et le numéro de plaque d'immatriculation de chaque Véhicule de covoiturage; et

c) L'Identification de véhicule de covoiturage.

Conducteurs

7(1) Le titulaire d'un Permis doit s'assurer que chacun des Conducteurs qui offrent le Voiturage :

a) Est âgé de 19 ans ou plus;

b) Détient un permis de conduire valide pour l'utilisation d'un véhicule motorisé pour l'année en cours, conformément aux dispositions de la *Loi sur les véhicules à moteur* et aux règlements afférents; et

(c) Has been advised and consents to the information under this section of this By-law being submitted to the City for the purposes of auditing or ensuring compliance with this By-law.

c) A été informé et consent à ce que les renseignements prévus au présent article soient soumis à la Municipalité aux fins de vérification et de conformité au présent Arrêté.

7(2) A License holder shall obtain a criminal record check that is less than ninety (90) days old and driver's record abstract less than thirty (30) days old for each Driver:

7(2) Le titulaire d'un Permis doit obtenir une vérification du casier judiciaire datant de moins de quatre-vingt-dix (90) jours et un dossier de conduite de moins de trente (30) jours pour chacun des Conducteurs :

(a) Prior to issuing a Driver Identification Card; and

a) Avant de délivrer une Carte d'identification de conducteur; et;

(b) Every twelve (12) months thereafter.

b) Chaque douze (12) mois par la suite.

7(3) Every License holder shall:

7(3) Chaque titulaire d'un Permis doit :

(a) Review the records contemplated at subsection 7(2) of this By-law;

a) Examiner les dossiers prévus au paragraphe 7(2) du présent Arrêté;

(b) Ensure that the Driver does not have any outstanding criminal charges; and

b) S'assurer que le Conducteur ne fait l'objet d'aucune procédure criminelle en instance; et

(c) Terminate the relationship with any Driver who is not suitable for providing Rides.

c) Mettre fin à la relation qui le lie à tout Conducteur non apte à fournir des Trajets.

7(4) Every License holder shall be responsible to ensure that every Driver to whom it has issued a Driver Identification Card complies with all obligations on Drivers imposed by section 12 of this By-law.

7(4) Chaque titulaire d'un Permis doit s'assurer que les Conducteurs auxquels il a délivré une Carte d'identification de conducteur respectent les obligations des Conducteurs prévues à l'article 12 du présent Arrêté.

7(5) Every License holder shall immediately terminate its affiliation with a Driver and cancel the Driver's Driver Identification Card if:

7(5) Chaque titulaire d'un Permis doit immédiatement mettre fin à sa collaboration avec un Conducteur et annuler la Carte d'identification du conducteur si:

(a) The Driver fails to satisfy any of the obligations imposed by section 12 of this By-law; or

a) Le Conducteur ne satisfait pas les obligations spécifiées à l'article 12 du présent Arrêté; ou

(b) If the City notifies the License holder that the Driver has acted in manner that is adverse to the public interest or public safety.

b) Si la Municipalité informe le titulaire d'un Permis que le Conducteur a agi d'une façon qui nuit à l'intérêt public ou à la sécurité publique.

7(6) Upon termination in accordance with section 7(5) of this By-law, the License holder shall ensure that the former Driver no longer has access as a Driver to the Technology Platform.

7(6) Dès la fin d'une collaboration conformément au paragraphe 7(5) du présent Arrêté, le titulaire d'un Permis doit s'assurer que l'ancien Conducteur en question n'a plus accès, en tant que Conducteur, à la Plateforme technologique.

Records

Dossiers

8(1) Every License holder shall create and maintain for two (2) years, records containing the following information:

(a) The total number of Rides provided per year;

(b) The total number of Drivers providing Rides per year;

(c) The total number of Ridesharing Vehicles providing Rides per year;

(d) The Driver and Vehicle-for-Hire Service information corresponding with each requested Ride, including:

(i) The full name of the Driver;

(ii) The license plate number of the Ridesharing Vehicles providing a Vehicle-for-Hire Service;

(iii) The date, time and duration of the Ride;

(iv) The location where each Passenger was picked up and dropped off; and

(v) Hours and minutes spent by the Vehicle-for-Hire Service in transporting each Passenger, including time spent en route to pick up the Passenger.

8(1) Le titulaire d'un Permis crée et tient à jour pendant deux (2) ans des dossiers contenant les renseignements suivants :

a) Le nombre total de Trajets effectués par année;

b) Le nombre total de Conducteurs fournissant des Trajets par année;

c) Le nombre total de Véhicules de covoiturage utilisés pour les Trajets par année; et

d) Les renseignements concernant le Conducteur et le Véhicule de covoiturage correspondant à chaque Trajet, notamment :

i) Le nom complet du Conducteur;

ii) Le numéro de plaque d'immatriculation du Véhicule de covoiturage offrant le Voiturage;

iii) La date, l'heure et la durée du Trajet;

iv) Les lieux approximatifs de ramassage et de débarquement de chaque Passager; et

v) Le nombre d'heures et de minutes de transport de chaque Passager dans le Véhicule de covoiturage, y compris le temps passé pour se rendre jusqu'au lieu de ramassage du Passager.

8(2) Upon request by the City, the License holder shall make the records listed at subsection 8(1) available electronically to the City within a reasonable time.

8(2) À la demande de la Municipalité, le titulaire d'un Permis fournit à la Municipalité les dossiers mentionnés au paragraphe 8(1) au format électronique dans un délai raisonnable.

8(3) The License holder shall keep all records in respect of each Driver for two (2) years after the Driver ceases to be affiliated with the Licensee.

8(3) Le titulaire d'un Permis doit conserver tous les dossiers concernant chacun des Conducteurs pour une durée de (2) ans suivant la cessation de la relation entre le Conducteur et le titulaire du Permis.

Insurance

9(1) Every License holder shall obtain and maintain at all times, insurance coverage:

(a) Of at least two-million dollars ($2,000,000.00) including public liability and property damage;

(b) From an insurer authorized to issue indemnity insurance policies in the Province of New Brunswick;

(c) Against liability for damages resulting from injury to or death of one or more persons and property damage in any one incident that includes:

(i) Contingent employers' liability and personal injury;

(ii) Broad form property damage and occurrence property damage; and

(iii) Employees as additional insurance, and cross-liability and severability of interest provision.

(d) In the name of the License holder;

(e) That names the City as an additional insured;

(f) That contains Non-Owned Automobile Insurance, issued by a company authorized to issue indemnity insurance policies in the Province of New Brunswick,

Assurance

9(1) Tous les titulaires de Permis doivent obtenir et maintenir en tout temps une police d'assurance :

a) D'au moins deux millions de dollars (2 000 000,00 $) couvrant la responsabilité civile et les dommages aux biens;

b) Délivrée par une société d'assurance autorisée à émettre des polices d'assurance et d'indemnisation dans la province du Nouveau-Brunswick;

c) En responsabilité pour tout dommage en cas de blessure ou de décès d'une ou de plusieurs personnes et pour les dégâts matériels résultant d'un incident comprenant :

i) La responsabilité éventuelle de l'employeur et les dommages corporels;

ii) La formule étendue de l'assurance dommages matériels et les dommages matériels causés par un événement; et

iii) Les employés désignés comme assurés supplémentaires, ainsi que la responsabilité croisée et une clause d'individualité d'intérêt;

d) Au nom du titulaire de Permis;

e) Qui désigne la Municipalité comme assuré supplémentaire;

f) Qui contient une assurance automobile des non-propriétaires délivrée par une société autorisée à émettre des polices d'assurance et d'indemnisation dans la province du Nouveau-Brunswick, avec une

with limits of not less than two million ($2,000,000.00) inclusive, per occurrence for public liability, bodily injury, death and damage to property;

(g) Permitting Drivers to carry Passengers for a Vehicle-for-Hire Company endorsement, or an equivalent endorsement acceptable to the City, included within an automobile liability insurance policy maintained on behalf of every Driver; and

(h) Containing an endorsement requiring the insurer to provide the City with at least thirty (30) days prior written notice of any cancellation or variation of the policy.

limite ne pouvant être inférieure à deux millions de dollars (2 000 000,00 $) par événement, pour la responsabilité civile, les dommages corporels, le décès et les dommages aux biens;

g) Permettant de transporter, moyennant contrepartie, des passagers selon approbation d'une Société de voiturage, ou une approbation équivalente acceptable pour la Municipalité, y compris avec une police d'assurance responsabilité civile automobile souscrite pour le compte de chaque Conducteur; et

h) Contenant une mention exigeant de l'assureur qu'il fournisse à la Municipalité une notification écrite préalable au moins trente (30) jours avant annulation ou modification de la politique.

9(2) Every License holder shall, upon request, provide the City with proof that each Ridesharing Vehicle offering a Vehicle-For-Hire Service affiliated with the License holder is covered by insurance required under this By-law.

9(2) Chaque titulaire d'un Permis fournit à la Municipalité, sur demande de celle-ci, la preuve que tous les Véhicules de covoiturage affiliés au titulaire du Permis en question sont couverts par une assurance, conformément au présent Arrêté.

9(3) If a License holder fails to comply with the insurance requirements as set out in this By-law, the City shall immediately suspend their License until such time as they provide proof, to the satisfaction of the City, that they are in full compliance with this By-law.

9(3) Si un titulaire de Permis ne respecte pas les obligations relatives à l'assurance telles que spécifiées dans le présent Arrêté, la Municipalité immédiatement suspend son Permis jusqu'à ce que le titulaire puisse prouver, à la satisfaction de la Municipalité, qu'il est en totale conformité avec le présent Arrêté.

Number of Ridesharing Vehicles

Nombre de Véhicules de covoiturage

10(1) Vehicle-for-Hire Companies shall be categorized according to the number of affiliated Ridesharing Vehicles offering Vehicle-for-Hire Services.

10(1) Les Sociétés de voiturage font l'objet d'un classement sur la base du nombre de Véhicules de covoiturage offrant le Voiturage.

10(3) When the number of Ridesharing Vehicles offering Vehicle-For-Hire Services affiliated with a License holder changes, the License holder shall immediately notify the City.

10(3) Lorsque le nombre de Véhicules de covoiturage offrant le Voiturage d'un titulaire de Permis change, ce dernier doit immédiatement en informer la Municipalité.

10(4) When the number of Ridesharing Vehicles offering Vehicle-for-Hire Services affiliated with a License holder change and affects the category in

10(4) Lorsque le nombre de Véhicules de covoiturage offrant le Voiturage affiliés à un titulaire de Permis change et que ceci affecte la

which the License was classified, the License holder shall immediately notify the City and, in the event of an increase, shall pay the corresponding fee under section 4 of this By-law within two (2) business days of such notification.

catégorie dans laquelle le titulaire de Permis était classé, le titulaire de Permis en informe immédiatement la Municipalité et, en cas d'augmentation, paie les frais correspondants conformément à l'article 4 du présent Arrêté dans les deux (2) jours ouvrables qui suivent une telle notification.

Drivers – Prohibitions

11(1) No person shall hold themselves out as a Driver unless they:

(a) Have been authorized by a License holder to act as a Driver for the Vehicle-for-Hire Company; and

(b) Possess a current Driver Identification Card issued by a License Holder.

Conducteurs – Interdictions

11(1) Pour se présenter comme Conducteur, une personne doit remplir les conditions suivantes :

a) Avoir reçu l'autorisation d'un titulaire de Permis d'agir en tant que tel pour la Société de voiturage;

b) Posséder une Carte d'identification de conducteur en cours de validité délivrée par un titulaire de Permis.

11(2) No Driver shall:

(a) Request payment for anything other than as permitted under this By-law;

(b) Refuse a request for a Ride by an individual accompanied by a service animal;

(c) Pick up any Passenger in response to a street hail or by any other means other than through the Technology Platform;

(d) Operate a Ridesharing Vehicle in a Vehicle-for-Hire Service that resembles a taxicab in any manner, such as bearing external advertising or a roof sign;

(e) Operate a Ridesharing Vehicle in a Vehicle-for-Hire Service without the insurance requirements under section 9 of this By-law;

(f) Accept payment by cash for any Rides;

11(2) Il est interdit à tout Conducteur de :

a) Demander le paiement pour un service autre que ceux autorisés en vertu du présent Arrêté;

b) Refuser une demande de Trajet pour un individu accompagné d'un animal de service;

c) Prendre un Passager faisant de l'auto-stop ou par tout autre moyen que la Plateforme technologique;

d) Conduire un Véhicule de covoiturage qui ressemble d'une quelconque manière à un taxi, par exemple en affichant une publicité externe ou une enseigne;

e) Conduire un Véhicule de covoiturage sans respecter les exigences en matière d'assurance, prévues à l'article 9 du présent Arrêté;

f) Accepter un paiement en espèces pour un service de transport;

(g) Accept Passengers through any other method other than the Technology Platform;

(h) Smoke or vape or permit any Passenger to smoke or vape in a Ridesharing Vehicle while being used for transportation as a Vehicle-for-Hire Service;

(i) Transport more Passengers than there are effectively operating seat belt assemblies in the Ridesharing Vehicle operating the Vehicle-for-Hire Service; or

(j) Breach any applicable obligations on Driver's imposed by this By-law.

g) Accepter des Passagers en utilisant une autre méthode que la Plateforme technologique;

h) Fumer ou vapoter ou autoriser un Passager à fumer ou vapoter dans un Véhicule de covoiturage pendant un Trajet de Voiturage;

i) Transporter un nombre de Passagers supérieur au nombre de sièges équipés d'une ceinture de sécurité opérationnelle dans le Véhicule de covoiturage exploitant le Voiturage; ou

j) Ne pas respecter les obligations applicables aux Conducteurs prévues au présent Arrêté.

Drivers – Obligations

12(1) Every Driver shall:

(a) Advise and immediately deliver to the City at a location designated by the City any property of the Passenger lost or left in the Ridesharing Vehicle;

(b) Keep their Driver Identification Card in plain sight in the Ridesharing Vehicle at all times when they are providing Rides;

(c) Upon demand by the City, a By-law Enforcement Officer or any Police Officer, produce:

(i) Their Driver Identification Card;

(ii) Proof of insurance as required by this By-law; and

(iii) Any other relevant information pertaining to them or to their operation of the Ridesharing Vehicle;

(d) Upon demand by the City, a By-law Enforcement Officer or any Police Officer, submit the Ridesharing Vehicle for

Conducteurs – Obligations

12(1) Tout Conducteur est tenu de :

a) Informer et remettre immédiatement à la Municipalité, à un endroit désigné par la Municipalité, tout bien du Passager perdu ou laissé dans le Véhicule de covoiturage;

b) Maintenir sa Carte d'identification de conducteur visible à tout moment dans le Véhicule de covoiturage lorsqu'il effectue des Trajets pour le compte de la Société de voiturage;

c) Sur demande de la Municipalité, d'un Agent d'exécution des arrêtés ou d'un agent de police, produire :

i) Sa Carte d'identification de conducteur;

ii) La preuve de l'assurance requise par le présent Arrêté; et

iii) Tout autre renseignement pertinent le concernant ou concernant son utilisation du Véhicule de covoiturage;

d) Sur demande de la Municipalité, d'un Agent d'exécution des arrêtés ou d'un agent de police, soumettre le Véhicule de

inspection at such time and place as specified;

(e) Install the Ridesharing Vehicle Identifier as provided by the License holder, in the front bottom of the passenger's side of the windshield on the Ridesharing Vehicle in such a manner that it is clearly visible and identifiable from the exterior; and

(f) Keep the Ridesharing Vehicle Identifier in its required location whenever they are providing transportation.

12(2) Every Driver shall ensure that the Ridesharing Vehicle being used in a Vehicle-For-Hire Service:

(a) Is no more than eight (8) years old; and

(b) Has a valid and current certificate of inspection showing that the vehicle has been inspected pursuant to the provisions of the *Motor Vehicle Act*, at the time the Driver begins to provide Rides and annually thereafter.

Enforcement

13 Common Council may, for the purposes of the administration and enforcement of this By-law appoint By-Law Enforcement Officers who may exercise such powers and perform such duties as set out under this By-law or in the *Local Governance Act*.

Offences

14 Every person who violates any provision of this By-law is guilty of an offence and liable upon summary conviction to a fine of not less than five hundred dollars ($500.00) and not more than two thousand one hundred dollars ($2,100.00).

Administrative Penalties

15(1) The City may require an administrative penalty to be paid with respect to a violation of a

covoiturage à une inspection à la date et au lieu spécifiés;

e) Installer l'Identification de véhicule de covoiturage fourni par la Société de voiturage sur la partie inférieure du pare-brise, côté passager, du Véhicule de covoiturage, de sorte qu'il soit parfaitement visible et identifiable de l'extérieur; et

f) Garder l'Identification de véhicule de covoiturage à l'emplacement requis, lors de chaque trajet.

12(2) Tout Conducteur est tenu de s'assurer que le Véhicule de covoiturage utilisé dans le cadre du Voiturage:

a) N'a pas plus de huit (8) ans; et

b) Dispose d'un certificat de contrôle en cours de validité, démontrant que le véhicule a été inspecté conformément aux dispositions de la *Loi sur les véhicules à moteur*, au moment où le Conducteur commence à fournir des Trajets, et annuellement, par la suite.

Exécution

13 Le Conseil communal peut, aux fins de l'administration et de l'exécution du présent Arrêté, nommer des Agents d'exécution des arrêtés qui peuvent exercer les pouvoirs et les fonctions prévus par le présent Arrêté ou dans la *Loi sur la gouvernance locale*.

Infractions

14 Toute personne qui contrevient à une disposition du présent Arrêté est coupable d'une infraction et est passible sur condamnation sommaire d'une amende d'au moins cinq cent dollars (500 $) et d'au plus deux mille cent dollars (2 100 $).

Pénalités administratives

15(1) La Municipalité peut exiger qu'une pénalité administrative soit payée relativement à une

provision of this By-law as set out in subsection 15(2).

15(2) A person who violates any provision of this By-law may pay to the City within 30 calendar days from the date of such violation an administrative penalty of two hundred and fifty dollars ($250.00), and upon such payment, the person who committed the violation is not liable to be prosecuted therefor.

IN WITNESS WHEREOF the City of Saint John has caused the Corporate Common Seal of the said City to be affixed to this By-law the ____ day of _____, 2022 and signed by:

infraction à une disposition de cet Arrêté, comme prévu au paragraphe 15(2).

15(2) Toute personne qui contrevient à une disposition du présent Arrêté peut payer à la Municipalité dans un délai de 30 jours civils à compter de la date de ladite infraction, une pénalité administrative de deux cent cinquante dollars (250 $), et une fois l'amende payée, la personne n'est plus susceptible de poursuites judiciaires.

EN FOI DE QUOI The City of Saint John a fait apposer son sceau municipal sur le présent Arrêté le _____ 2022, avec les signatures suivantes :

_____
Mayor/Maire

_____
Common Clerk/Greffier communal

First Reading	-	Première lecture	-
Second Reading	-	Deuxième lecture	-
Third Reading	-	Troisième lecture	-

Schedule A

Application for Vehicle-for-Hire Company License

To Be Completed By Applicant:

Applicant's Name: (Please Print)
_____

Applicant's Address:
_____

Telephone: _____ (Day)

Proposed Company Name:
_____

Proposed Company Location:
_____

Status: ❑ Individual ❑ Partnership ❑ Corporation

If the applicant is a partnership, a copy of the partnership agreement must be attached.

If the applicant is a corporation, a copy of the article of incorporation must be provided with certificate that the applicant is a corporation in good standing with Service New Brunswick Corporate Registry.

If the applicant is a partnership or corporation, list the members of the partnership or the officers and directors of the corporation.

Name Date of Birth
_____ _____
_____ _____
_____ _____

Number of Ridesharing Vehicles: _____

List of Ridesharing Vehicles by License Plate Number (attach additional list if necessary):
_____ _____ _____ _____
_____ _____ _____ _____

Please outline the data security measures the applicant has in place to protect the personal information of Drivers and Passengers affiliated with the Vehicle-for-Hire Company (attach additional paper if necessary):
_____
_____
_____
_____

Do you or any of the officers, directors or partners, or the company have any convictions for any offences under the *Criminal Code of Canada*, the *Controlled Drug and Substances Act*, the *Food and Drug Act of Canada*, the *Young Offenders Act* or the *Liquor Control Act* within the last five years? If "YES" explain the

nature of the offence(s) in the space provided below. (Notwithstanding the foregoing, "criminal record" includes any pardons and criminal offences found within the Schedule to the *Criminal Records Act*.)

❑ NO ❑ YES

_____

_____

Signature of Applicant: _____

To Be Reviewed By Applicant:

It is the responsibility of the applicant to complete the form correctly.

CHECKLIST:

Please complete all documents prior to submitting Application Package to the City of Saint John.

Check off boxes to ensure your Application can be processed.

❑ Applicant has attained the full age of 19 years.

❑ Application Form – completed by Applicant.

❑ Confirmation of insurance as identified under the *Saint John Ridesharing By-law*.

❑ Checklist – reviewed by Applicant.

❑ Present completed Application Package in person to the City of Saint John Customer Service Centre.

City of Saint John - Customer Service Centre
City Hall, 15 Market Square
Saint John, NB E2L 4L1

Telephone: (506) 658-4455
Hours of Operation:
Monday to Friday, 8:30AM – 4:30PM

❑ Payment for Vehicle-for-Hire Company License:

The following fees shall be paid to the City upon application for a Vehicle-for-Hire Company License under this By-law:

(a) Class "A" - $7253.00
(b) Class "B"- $2469.00
(c) Class "C"- $807.00

The following fees shall be paid to the City upon renewal for a Vehicle-for-Hire Company License under this By-law:

(a) Class "A" - $7253.00 + $0.20/ trip (January 1 – December 31 previous year)
(b) Class "B"- $2469.00 + $0.20/ trip (January 1 – December 31 previous year)
(c) Class "C"- $807.00 + $0.20/ trip (January 1 – December 31 previous year)

(For payment by cheque: make cheque payable to the City of Saint John)

_____

_____

To be completed by the By-Law Enforcement Officer:

This application is: ❑ APPROVED ❑ DENIED

Reason(s) for denial

_____

Signature: _____ Date:

_____

By-law Enforcement Officer Year/Month/Day

Annexe A

Demande de permis d'une Société de voiturage

À remplir par le requérant :

Nom du requérant : (Caractères d'imprimerie S.V.P.)
_____

Adresse du requérant :
_____

Téléphone: _____ (jour)

Nom commercial proposé :
_____

Emplacement commercial proposé :
_____

Statut: ❑ Un particulier ❑ Société de personne ❑ Corporation

Si le requérant est une société de personnes, une copie du contrat de société de personnes doit être jointe.

Si le requérant est une corporation, une copie du statut constitutif doit être fournie avec un certificat attestant que le requérant est une corporation en règle avec le Registre corporatif de Service Nouveau-Brunswick.

Si le requérant est une société de personnes ou une corporation, énumérez les membres de la société de personnes ou les dirigeants et administrateurs de la corporation.

Nom Date de naissance

_____ _____
_____ _____
_____ _____

Nombre de Véhicules de covoiturage : _____

Liste des Véhicules de covoiturage par numéro de plaque d'immatriculation (joindre une liste supplémentaire si nécessaire) :

_____ _____ _____ _____
_____ _____ _____ _____

Veuillez décrire les mesures de sécurité des données que le demandeur a mis en place pour protéger les renseignements personnels des Conducteurs et des Passagers affiliés à la Société de voiturage (joindre des renseignements supplémentaires au besoin) :

_____
_____
_____
_____

Est-ce que vous ou l'un des dirigeants, administrateurs ou associés, ou l'entreprise, avez été condamné pour une infraction au *Code criminel*, à la *Loi réglementant certaines drogues et autres substances*, à la *Loi sur les aliments et drogues du Canada*, à la *Loi sur les jeunes contrevenants* ou à la *réglementation des alcools* au cours des cinq dernières années? Si « OUI », expliquez la nature de l'infraction ou des infractions dans l'espace prévu ci-dessous. (Nonobstant ce qui précède, le « casier judiciaire » comprend toutes les réhabilitations et infractions criminelles figurant dans l'annexe de la Loi sur le casier judiciaire.)

❑ NON ❑ OUI

_____
_____

Signature du requérant: _____

<u>À examiner par le requérant:</u>

Il incombe au requérant de remplir correctement le formulaire.

LISTE DE CONTRÔLE :

Veuillez remplir tous les documents avant de soumettre le dossier de demande à la Ville de Saint John.

Cochez les cases pour vous assurer que votre demande peut être traitée.

❑ Le requérant a atteint l'âge de 19 ans.

❑ Formulaire de demande - rempli par le requérant.

❑ Confirmation d'assurance telle que définie dans le cadre de l'*Arrêté concernant le covoiturage à Saint John*.

❑ Liste de contrôle - examinée par le requérant.

❑ Présenter le dossier de demande dûment rempli en personne au centre du services à la clientèle de la Ville de Saint John.

La Ville de Saint John – Centre de service à la clientèle
Hôtel de ville, 15 Market Square
Saint John, N-B E2L 4L1

Téléphone : (506) 658-4455
Heures d'ouverture :
Du lundi au vendredi, de 8:30 h à 16:30

❑ Paiement du permis d'une Société de voiturage :

Les frais suivants doivent être payés à la Ville lors de la demande d'un Permis d'une Société de voiturage conformément au présent arrêté:

(a) Classe « A » - 7 253,00 $
(b) Classe « B » - 2 469,00 $
(c) Classe « C » - 807,00 $

Les frais suivants doivent être payés à la Ville lors du renouvellement d'un Permis d'une Société de voiturage conformément au présent arrêté :

(a) Classe « A » - 7 253,00 $ + 0,11 $/trajet (du 1er janvier au 31 décembre de l'année précédente)
(b) Classe « B » - 2 469,00 $ + 0,11 $/trajet (du 1er janvier au 31 décembre de l'année précédente)
(c) Classe « C » - 807,00 $ + 0,11 $/trajet (du 1er janvier au 31 décembre de l'année précédente)

(Pour le paiement par chèque : libeller le chèque à l'ordre de la Ville de Saint John)

_____

À remplir par l'agent d'exécution des arrêtés :

Cette demande est : ❑ APPROUVÉE ❑ REFUSÉE

Raison(s) du refus

_____

Signature: _____ Date:

_____

Agent d'exécution des arrêtés Année/mois/jour

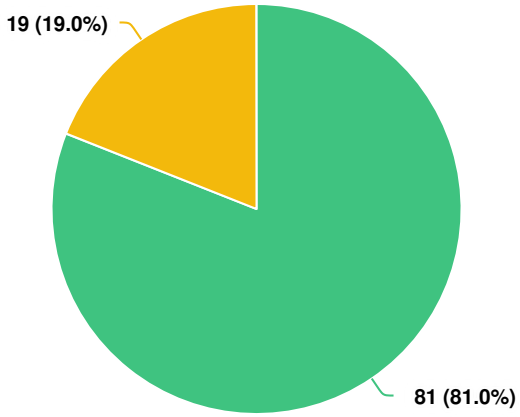
Share your thoughts on allowing ridesharing companies to operate in the City of Saint John

SURVEY RESPONSE REPORT
08 March 2022 - 06 April 2022

PROJECT NAME:
Establishing a by-law for ridesharing companies to operate in Saint John

SURVEY QUESTIONS

Q1 Have you used ridesharing service somewhere else?



Question options

Yes No

Optional question (100 response(s), 0 skipped)
Question type: Radio Button Question

Q2 If so, what was your experience?

Rideshare immediately replaced my using a taxi because of convenience, cost and business practices. The taxi companies in Calgary were unreliable and a bit shady, when uber came in I didn't feel that anymore.

Fine but I have since become aware of the harmful effects on local communities and transit

Excellent. Clean and new cars, accountability and speed of service

Very easy and liked the service

Easy to use. Can tell where your drivers are at all time and when they arrive. You know the price before you get into the vehicle.

Pleasant, quick and affordable

Pleasent experience. Pricing was decent and included many extras such as beverages and snacks. Seemed a lot more professional than a cab service

Ease of use and clean cars.

Extremely positive in cities across Canada and globally. Convenient, cost effect, safe, and transparent (good drivers had good rankings from verified users). The exception was city developed unique systems/apps which weren't great.

Great!

Taking ubers when missing the bus/needing to get somewhere quickly

Having used ride sharing in Toronto, I find that they are a convenient way to move across a city for people unable to drive/afford a vehicle/intoxicated

Amazing. We need it In SJ. Felt safer than in a cab. More reliable than cabs

Uber in Montreal and it was great

It was excellent. It was safe, reliable and affordable.

Fast, easy, affordable. Drivers clean, cars newer, clean. Professional

Wonderful!!! It felt safe and easy. I knew when to expect my ride, and it did not take long.

Great!

Clean cars, friendly service, held accountable because of ratings and reviews so no smoking in cars, body odour, j professionalism that plagues industry here

It was a great alternative to taxi, easy with an app. 10/10

Excellent

Experience was almost always positive. Good rates, good availability and good incentive to be a good passenger. Drivers are respectful, cars are clean, etc

I have had various great and safe experiences with rideshares. They provide a convenient and affordable method of transportation for me.

Exceptionally pleased. Great service, quick and convient and a fair price.

We are in 2022 stop acting like we are in 1970

Great experience in many different cities in US and Canada. Definitely an improvement on the current model.

Outstanding, faster than taxi's and if I were to guess cheaper everytime.

Excellent

In Toronto, Ottawa and Halifax, ride-hailing is well accepted to be more convenient, technologically advanced and cost-effective than traditional taxi services.

Easy, secure and cost efficient. Loved it

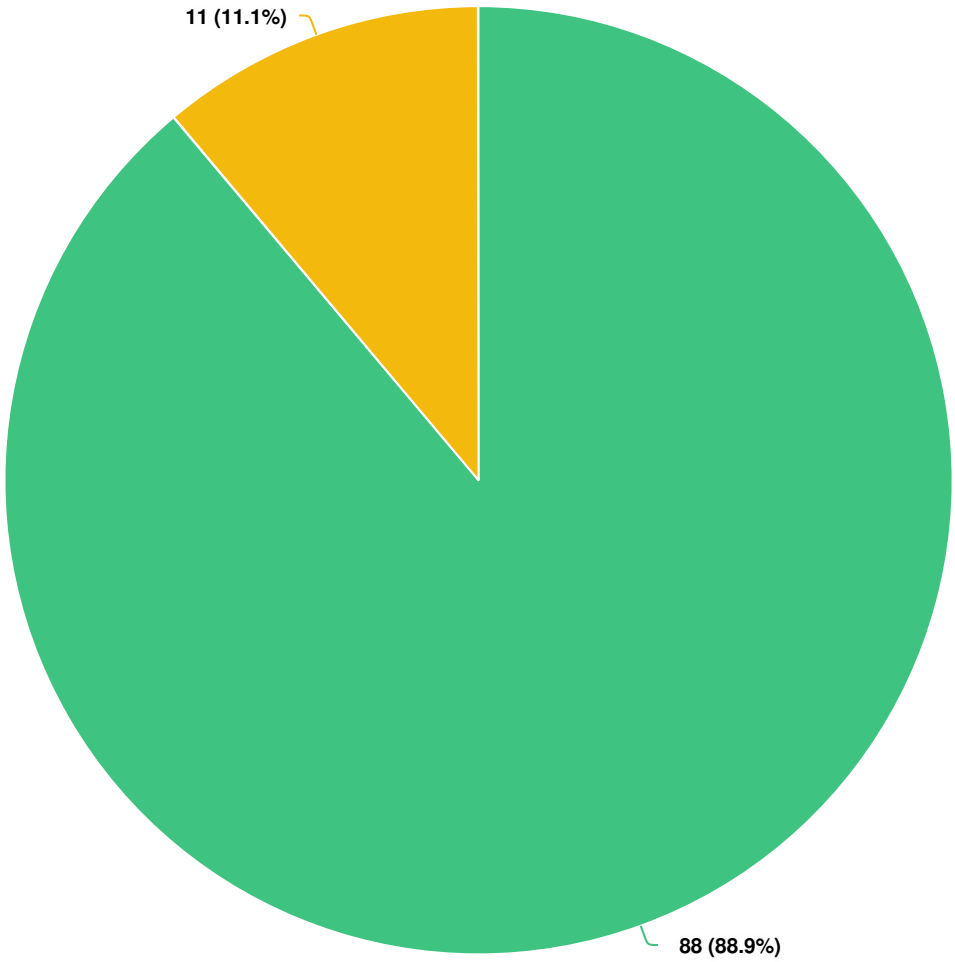
A great fast option to get around towns - I am more apt to use ride share over a taxi.

Great experience, speedy service and you know where your ride is at all times, Also provides a safety aspect of your routs always being tracked.

Great, no waiting for a taxi, no handling of cash.

Optional question (33 response(s), 67 skipped)
Question type: Single Line Question

Q3 If ridesharing companies were allowed to operate in the City of Saint John, would you use them?



Question options

Yes No

Optional question (99 response(s), 1 skipped)
Question type: Radio Button Question

Q4 Why or why not?

Great value; flexibility; current taxis in Saint John are disgustingly dirty

They add another choice to the city. I have had nothing but a great experience using them in other cities

If I want to have a drink with friends

They are cleaner, they have star ratings, the apps are the best, faster, just overall much better. We had corporate executives fly into SJ, first impressions was a smoky old taxi, they needed to wind down window to get fresh air. This should not be the impression anyone has of SJ.

Provides an alternative to current taxi service. Would improve overall service within the industry.

They are faster, cheaper and more convenient than conventional taxi services. Arranging a pick-up time and place through a mobile app is preferred to calling a taxi service. They offer up to date estimates of when the vehicle will arrive and notify you of arrival. Currently, wait times for taxis during peak service periods can be unreasonable and sometimes impacts my decision of whether to go out in the City.

Clean, fast, cost effective, convenient, provides jobs, improves cities image. Gets with the times

Accountability: With a two way rating system in rideshare apps, the driver rates the rider and the rider rates the driver. This makes drivers keep cleaner cars, ensures they don't smoke in their cars during or between calls, and gives them incentive to be polite. It also incentivizes the rider to be respectful/courteous to the driver. Today, without a rating system, all cab rides are just random anonymouy encounters. As it is today, a driver or rider can be rude with relatively no accountability or recourse for either. Predictability: It tells you where the car is before you order it and how long before its at your door. Saint John cab company operators' standard response for how

long the cab will be before it arrives is "10 minutes" no matter whether it will be 50, 30, 15, or 5 mins. Safety: As a rider, you get to see who your driver will be before they show up. As a driver, you get to see who your rider is before you pick them up. There's record of the driver, rider, length of trip and geographic record of the trip. If a driver/rider is physically aggressive or breaks the law during the trip, they're banned from the platform. Today, these encounters are anonymous and after they've occured, there is no mechanism in place to prevent the driver from continuing to drive a cab or to prevent the rider from future rides.

Great way to get somewhere and they usually have an app

convenient

My 92 yr old mom and I do not drive.

Because it's good to have an alternative to driving, especially as the only driver in my household.

Absolutely! My experience in many cities and many countries has been consistently fabulous. As an avid taxi rider in Saint John, the cars are very poor quality often and a pick up is not always reliable. The taxi drivers can become ride share drivers and all should work out. Using the rideshare apps is also much easier than calling multiple taxi companies looking for an available taxi.

Cabs are never on time where I live.

I'm concerned for the financial welfare of cab drivers. I had to use a lot of them and got to know some of them and their issues. I know they are expensive especially for the elderly and the disabled like myself. As to rideshare in specific. I don't know that I would feel safe with the drivers. They may be fine but as a senior and being disabled I am a prime target for crime. It worries me for myself and for others including all women.

Recent studies have found negative effects from ridesharing

3	companies, such as increased congestion, higher traffic fatalities, huge declines in transit ridership and other negative impacts. We should be investing in public transit to help anyone in our ccommunities of any household medium instead of those with large disposable incomes. Also their business models are exploitive to their workers.
	A matter of principle. Ridesharing apps increase traffic and congestion (and therefore emissions), working conditions are poor and the pay is bad, all the liability is shafted onto the driver since these services classify their labour as independent contractors, and their STATED GOAL is to compete with (and take away ridership from) transit, which is already bad as it is. Invest in our transit service before screwing it further!
	100% I find them safer than taxis, it hold both parties accountable. You can also track the arrival time so both you and the driver are not left waiting.
	They will be taking away business from the taxi companies and taxi drivers who are already struggling to make ends meet
	We have taxi cabs
	Clean, easy, quick, no cash exchange, can track vehicle, predictable fare
	I could not type in the above box. Ive used ridesharing in Ottawa often and I love it, its very convenient way to get to work, and is often faster and more cost effective than a typical taxi service. It will especially be nice to have another option for people living outside the city, cheaper and faster ways for them to come visit, or to get to their jobs in the city as the buss systems seem to be failing on that. It will help a lot when we have tourists again, they wont have to wait for cabs as long, will be able get to local shops faster, and will be able to use the food delivery sections of some (like uber) to get local food to them without having to stray to risk missing their ships departure.
	Because they are easy to book, I know exactly how long I have to wait, can track the cab on my phone, have clarity on pricing and complaints are heard very well, also safe as I know the driver details

and driver review before boarding the cab

Cleaner, safer. Better system for drivers than traditional taxi models.

Meh they are not really licensed. And it’s sketchy ordering for a stranger from the internet. Although I trust most people in Saint John, but the fella who drives that car that barely runs seems way more sketchy.

It would enable more convivence and allow better competition.

Ride sharing is much more secure than traditional taxis as your information and the driver's information are shared electronically and can always be followed up on. My first experience with ride sharing was in New York city and I noted to the driver you don't have a safety barrier in the backseat he asked why would I need it and I said what if I kill you he said why would you do that I have all your information I can find you right away. My son was traveling and left something in an uber in London england he was able to reach out to uber and the cab driver called me as my son was still traveling within 20 minutes to let me know that he had the item. In a similar situation in columbus ohio my son left camera gear in the back of a local taxi and it took us 2 hours and a lot of sweating to try and figure out which cabinet was and whether or not we would ever see that gear again

It's much more convenient with a technology assist than traditional taxis.

Please note: Question 2 does not allow comments. Ridesharing is a fast, cost-efficient alternative to the traditional taxi. There is absolutely NO reason why we should not have access to ridesharing in Saint John.

Easy, affordable

Great service

From an environmental sustainability perspective, ride-sharing has the lowest carbon footprint. If I were planning to drive into the city from Quispamsis, I would probably pick up a passenger. Ridesharing is safe and reliable and predictable.

Higher standards/cleaner/great app. Saint John says they are “hub of innovation”….can’t be that without ride sharing.

I would absolutely use ride sharing if it was operating in the city of Saint John. Uber and Lyft provide a much more convenient and modern experience for users than conventional taxi services (being able to order them electronically and at all hours of the day) and ride sharing services also provide a more secure service, due to the requirements for strict background checks. As well, further competition with other transport options (public transport, established taxis) would provide for a certain degree of regulating the monopoly that the taxi industry has and will make these services more available cost wise. As well, it would provide a boost to the local economy as city residents would be able to take advantage of the city’s hospitality scene and would be able to travel safely, via a ride share. It could also be a slight uptake in tourism as visitors from larger cities may feel more comfortable taking a ride share on their visit to Saint John and the region.

They so quick, easy and I like that no money changes hands.

It’s an essential service. Hard to live without. Safer, more reliable and convenient than other options.

Taxi service in SJ is awful. Dirty cars. Smell of smoke.

Definitely would use. Much more convenient.

Taxi's in SJ are super costly. I am unable to understand why they start with $5 and charge 0.5 cents for each 30 seconds of wait at signal or at traffic. If we pay through debit card they charge extra 1$

They are far superior to taxis. Easy to use. Clean. Safer. Pricing is clear. Time to destination is clear. Superior in every way.

Yes, for the convenience of being able to book a ride to visit a friend, go shopping, or get to an appointment on my phone, and know when to expect the ride to show up (so I can be on time). And the safety to know the licences plate, make of the car, and name of the person that's service//safetly is self-regulated by the apps rating system

3

Please bring ride shares here. They create jobs and save SO much money. My family used them daily in Toronto when we lived there. The transit system here is SO LIMITED. It's hard to get around in Saint John. We need this.

Don't care for metered cabs

Easy to access and reliable

I loved taking ubers and ride shares back in ONT - they are more affordable you can employ more people. The people driving can pick their own hours and a lot of drivers were using uber to make extra money to put their kids in extra curricular activities- I believe this could help people with that here too.

Because I did not have a car at the time, my destinations were usually just out of walking distance.

Online interface (app), predictable arrival, easy payment, info on driver (safety), clear pricing, less need to interact with the driver.

Great service, good alternative to old-fashioned taxi service.

Not good for the drivers, they become slaves to a tech company, and a portion of their income and the cities income is forever diverted to their pocketbooks. (If a upgraded feature was available with the existing local cabs such that they had an application that provided the same features that would be okay) If the city were to undertake to be that owner of that application and licensed out the service, that would work.

Question 2 does not allow input Rideshare services have been clean, reliable and consistent in pricing in other areas. I would use the ride share program in SJ as our taxis are dirty, unreliable and very difficult to get, particularly during peak times. Waiting an hour to get a taxi put people in a position to make bad decisions. Also our taxi's charge so many different fees (My favourite restaurant to home can be anywhere between $10-$20) Same route, same 2 people but the fee changes greatly. With ride share I know the driver has a clean, reliable car, when it will arrive and what I am charged. I know taxi's will be upset about this but they have had years to improve their service.

for convenience and not having to phone a cab.

never seems to be a taxi available when you need them - very long wait times if you are trying to find one in non-peak hours - not always the cleanest (although they have gotten better)

It would be great to have an alternative to cabs, and ridesharing is more convenient and safer than taxis (no cash payment between driver and rider, you can share your trip GPS with people so they can track where you are). There are safer/faster/better records with rideshares than with taxis, and most importantly, I don't like supporting businesses with unions.

It is extremely convenient. Even more convenient than taxi apps. Also - it is more flexible and the associated apps like Uber Eats offer better promotions and competition and variety. Rideshare is long overdue in Saint John. Please allow it to happen as soon as possible.

Reliability and accessibility. A busy night in Saint John there isn't a cab to be found, to try and get to the valley in a cab is out of the question.

please have a look at this article https://usa.streetsblog.org/2019/02/04/all-the-bad-things-about-uber-and-lyft-in-one-simple-list/ or if you have more time check out James Wilts excellent book "do androids dream of electric cars"

Currently we have dirty, old, dingy taxis and drivers...and rates. Ride share companies also provide better paying opportunity and modern 21st century infrastructure addition and accountability on the part of drivers.

Great alternative to a taxi or bus

Easier to use then the local taxi companies

I support funding our public transit and improving that service. Ridesharing also creates gig workers which are unstable jobs and cant be unionized.

From time to time not on a regular basis. Taxis in Saint John have become limited in available cars, 90% of the drivers are foreigners' who try to treat Saint John like the 'Big Cities' looking for top dollar for fares and taking the long route or slow driving to feed the meter(s)

Quicker and more professional experience in the past.

Ridesharing companies like LYFT and UBER take profits back to their corporations while SJ could just as easily develop it’s own municipal ride sharing app that integrates with transit/taxis/private operators that does the same thing for 200K and allows profit generation. Municipal crown corps for the win!

Typically more available, convenient, and cost effective than standard cabs or buses. I have my own vehicle, and I still used ride shares in other cities I've lived in. There are always potentials for situations where one doesn't want to, can't or shouldn't drive.

It is convenient

Because they're handy

I may or may not use it, depending on the price. This in return will lower the taxi services but feel that the taxi will raise prices

I think that ride sharing is a convenient way to handle unplanned travel. Such as if a bus route stops running, or if public transit doesn't fully cover a route I need to take. As well I would use ride sharing when I am not in a safe state to drive

Faster. Cheaper . More reliable . Customer oriented / stars for feedback.

I enjoy using the apps over calling for taxi

It would be safe, reliable and affordable.

The bus service has become too cumbersome. I can’t get back and fourth to work with the cuts. Travel time too long, service constantly changing for the worst. Taxis are too costly, cars are not maintained. Dirty cars. Drivers not helpful. Too long of a wait.

Yes I would use. I feel safer in them than in a cab. There is tacking to know I am staying safe. The cars are nicer. The payment is easy. I feel like I have more choice in my ride. I know the cost of my ride right away instead of guessing what the cost will be.

They are easier to use, cheaper typically and more convenient.

Convenient. Know when car is coming. Upfront pricing

I don’t live within the uptown but would attend more events and eat/drink more. Cabs are quite expensive too

Efficient and like cashless transactions

Taxis, while having made improvements, are still a bit before average in Saint John. Prices are often inconsistent, cars often old and the like.

ride share companies are usually cheaper and faster than taxies or city transit.

As long as they, Undergo a check of their driving record. Upgrade to a Class 4 license, the provisions of which include providing a medical fitness report. Have a clean driver’s abstract. I believe the above items are required by the province.

I do not drive, so getting to far away places can be a difficult task. Buses take a long time and taxis are quite expensive. In my experience, rideshares have been much more practical for me.

Accessing a taxi in Greater Saint John is nearly impossible. I have waited literally hours for a cab to come to my home for a pick-up. Often I will walk from my home in Rothesay to a local restaurant as I know a taxi into and out of Saint John is a massive crap shoot and not worth the risk!

we all have smart phones why do i need to call a taxi that takes about an hour to get to my house!

Like being able to book from my phone knowing what kind of vehicle is coming and when and who is driving.

M

I have found the customer service, staff and speed at a higher level than any taxi company I've used in our city before.

They are a great value, fast and efficient

Safety - you don't know who the person is and they aren't an employee of a company that you can check on

The taxi services in Saint John are worse in my experience than in many other comparable and larger cities. Ridesharing services are

typically cheaper than traditional taxi services, which is great for passengers, and their apps let you order from your phone and see where your driver is, which is great in a colder climate like ours. Plus, I would love to more support small business owners.

I live in the city and have no access to a city bus route.

I am more willing to use ride share than a taxi - more so the fact that rideshare is the way of the future, with improved technical connection to be able to use your mobile phone to track the location at all times.

Absolutely, there aren't enough cabs to keep up with demand, over the last 2 years I have received very poor service from cab companies who just pick up their phones, are very rude and consistently provide a 30-45 minute wait when though I am in the city.

Real time app with an ETA of the driver. Also, no one steals the ride I called after having a few drinks or a night out at the bar.

Optional question (92 response(s), 8 skipped)
Question type: Essay Question

Q5 Please add anything else you think we should consider.

The stranglehold that a couple of taxi companies in Saint John have on ride services has to be dismantled

You should allow ride sharing in Saint John. It will give more choice to citizens and create income for those who choose to drive for a ride share company.

Having a service like Uber or Lyft in Saint John would be fantastic and hopefully reduce drunk driving

I really think this is a no brainer. SJ need better transportation options across the board. We have some of the largest companies in Canada headquartered here, we need to have a world class experience from airport to cruise terminal and all stops in between.

Saint John cannot, and should not, be against the move to technologies bettering the lives of individuals. The playing field should be "level" so that there is not an advantage for either the current taxi industry, or ridesharing.

a city without ride sharing lacks vision

Ride sharing services do not only bring more accountability, predictability and safety for drivers and riders. They also result in a bigger cut of the fair for drivers and result in a lower cost to the rider. Cab companies locally add very little value to the equation, yet take a very large portion of the fair. With a ride sharing service, it lowers the cost to riders and pays more to drivers.

Both my sons would use. It is very difficult to get cabs after the bars are closing. They would use this, instead of needing to call me because they cannot get a taxi. We have all used uber when travelling and it is an excellent service. Drivers can be rated, and because of this, cars are very clean, and drivers are very friendly and helpful.

Approve ride-sharing!

Please, please, please consider this. I have felt so unsafe in taxis. lots of old cars full of indicator lights. I've experienced a tire blow out and stood on the grass near the highway, the spare was flat so we both (taxi driver and me) stood waiting for "his friend" to come take me to the airport. We can do better!!!!

The choice between cab or Uber would be welcome.

We should invest in transit, safer biking lanes, greener models of transportation, and not abusive ridesharing companies who will exploit our community members and congest our roads.

INVEST IN TRANSIT. INVEST IN TRANSIT. INVEST IN TRANSIT. INVEST IN TRANSIT. INVEST IN TRANSIT.

With taxi drivers you can develop a rapport with an individual driver who will get to know you and you them. You can usually request to have your favourite driver pick you up. I don't think this is possible with ride-sharing. If for some reason you are not capable of telling your ride where to go or where you live, if the driver knows you they can probably look after you. I don't think I could trust a stranger to transport my children or my elderly relatives safely as I can with a familiar driver

Taxi companies as we know them could offer this thus adding to there revenue that has crippled them since covid ,ride sharing was offered when it was under a zone system\.

I would support Good experience I use when travelling.

People will probably make a fuss, especially the ones who own taxi services or independent taxis, but its important to remember that we cant hold back the cities opportunities to grow just because some people will have competition. Its wonderful that these services may finally be coming to the city, it helps it feel like a bigger and more established city when we bring in services like this, that other places have had for so long. If you need any other stats to look at just have a peek at skip the dishes and door dash, they only came to the city recently despite being in several others for many years and they absolutely exploded! I cant throw a stick without meeting someone who works for them, or someone who's order far too much food because it was much easier through them. Services like this make it easier for the public to travel, and end up putting a lot back into the economy.

Ridesharing is very important for a city to develop and attract new people in the cities especially new immigrants.

Source of income for those who struggle to find jobs that fit their hours, like single parents. Or seniors who want to supplement their income but can't commit to a set schedule.

Just sketchy.

Lets keep moving our city forward!

There are multiple ride-sharing applications all of them are good. They exceed the safety experience that you would get in any local taxi and for the most part the drivers are much more attentive and eager to make a living. We tend to be slow to move in New Brunswick as is noted by everybody it's time to change this law now and to become part of the technological revolution that has changed every industry including taxis there is no downside to this

1. Read the OECD (Organisation for Economic Co-operation and Development) reports on ride hailing services (https://www.oecd.org/competition/taxis-and-ride-sharing-services.htm) an, specifically, the submission from Canada (https://one.oecd.org/document/DAF/COMP/WP2/WD(2018)2/en/pdf) 2. Taxis and ride hailing services (RHS) should be regulated similarly. This may require some level of deregulation of the taxi bylaw as well to ensure taxis can compete fairly 3. If the preference is to not have RHS's operate like taxis and vice versa as stated above in Item 2, the regulations should clearly state that a two-tier system exists and that customers be made aware of the differences between the tiers. For example, taxis may become a higher tier service with professional drivers, newer cars, background checks, etc., where RHS's become more budget-friendly options at the cost of certain standards. 4. RHS's notoriously under-pay their drivers creating a false economy and takes advantage of drivers. Regulations should ensure drivers (for RHS's and taxis) are compensated at an hourly rate no less than the minimum wage and, preferably, a living wage. 5. For better customer pricing via competition, regulated fares should be eliminated in favour of minimum fares (to ensure drivers make an adequate wage) and maximum fares (so customers aren't taken advantage of). This will allow service providers room to adjust pricing as needed based on time of day, business / slowness, weather conditions, etc. 6. Various legal challenges have been raised over drivers for RHS's being considered independent contractors or employees. The regulation of RHS should make this explicitly clear to avoid confusion. This also plays into creating a level playing field between taxis and RHS's. 7. In all cases, minimum protections need to be regulated to ensure the safety of passengers. Background checks, safety standards, licensing, etc. must be necessary. 8. From the Canada's OECD submission, all regulations should have performance metrics and data that is reviewed on a regular schedule to ensure the regulations are serving the purposes and outcomes they've been designed for (the City, unfortunately, has a bad habit of not doing this, in my experience): "Regulations should be made and tested using ***empirical evidence*** wherever possible. Industry

participants have an incentive to convince regulators to impose rules that favour and protect their own interests, rather than the public interest. To keep this process honest, ***regulators should demand and rely on empirical evidence to test the efficacy of any new regulation wherever possible.*** This evidence-based approach to regulation provides a more objective basis on which regulations should be imposed. ***Regulators should be able to demonstrate that a rule will have an intended result prior to implementation,*** and progress should be measured on an ongoing basis to assess whether the rule is having its intended consequence."

It is near impossible to use taxis between Quispamsis and Saint John due to reliablity of the companies and wait times. Ridesharing will completely change the amount of time I spend dining in Saint John. I expect I will spend thousands at the local restaurants and entertainment Venues.

It's crazy to have a 5 question survey when you can't input information in one of the questions. Please consider allowing ridesharing in SJ so we can keep up with the rest of the world!

Please bring Uber to SJ

Ridesharing would cut down on the number of alcohol-related incidents. Most people drink alcohol while dining out in Saint John and likely drive home. The taxi service is appalling and not reliable to support an evening out.

Consultation should be done with the other municipalities in the region (Rothesay, Quispamsis, GB-W), as many of the users would be residents of those municipalities who are in Saint John, possibly taking advantage of the the hospitality scene.

We recently made the decision to move to Saint John and a major con was the lack of rideshare options. Allowing Uber/lyft and others to operate in Saint John will be a great benefit for the city. Taxi companies are traditionally the only naysayers to this question - they should focus on providing a comparable service rather than attempting to block out competition.

Non smoking cars. Newer cars. Clean Cars and drivers. Need to feel

safe while in the car. Lyft. Not Uber.

I believe Uber and Lyft would be enough

It’s an expectation now that great cities have ridesharing.

(please note question 2 response select isn't allowing me to type in a response). Ridesharing companies provide a service that makes getting around Saint John more accessible to everyone, including parents, the elderly, people with disabilities visible/non-visible (running errands, going to appointments, getting to work on time, visiting friends or family). Currently, the city bus system and cab service provide transportation to our community but the need for transportation is beyond the capacity that they can provide and continues to grow. This service also provides an opportunity for employment (full time and part-time). In the cities I have used these rideshare programs, I have met all different types of people who were drivers; some parents giving a few quick rides after dropping off their kids at school and before heading to work, university & college students, full-time drivers, and more.

Uber. Please bring Uber to Saint John!

Taxi service in Saint John for the greater area is not readily available making it more likely that ppl outside of the city won’t bother going in for dinner/ drinks, etc. ride sharing company will change that

I think uber or ride share is evolving - there will always be pros and cons to everything but with a growing city and more people moving out East I think adding this service would be great for job opportunities, and would help the growth of this city. Many other provinces use these apps so when tourists come as well its a way for them to easily get around.

Saint John is a very spread-out city, With walking between burrows being unrealistic for the majority of the population. Ridesharing would enable people to get from area to area and increase spending!

Opposition may come from cab companies. If they are afraid to lose

business, they should work on matching the advantages in my previous answer.

Please pass the bylaw allowing ride-sharing. It is a great service, fast and convenient to use. We have used these services in Canada and in other countries, and have had overwhelmingly positive experiences.

The cost of gas The cost of car repairs The cost of administration The effect is that these drivers don't make living wages normally, and that they are extracting value out of their existing assets, which is deteriorating that asset, so while it looks like they are earning money, when they have to replace the car or deal with the leasing terms than they can get into trouble.

This is long over due- we claim to be an advanced, technological city and to still be held at the mercy of the taxi industry is unacceptable. If taxi drivers don't like it they can keep driving their taxi's but if they can improve their cars, service and reliability there is nothing stopping them from becoming ride share drivers.

where ridesharing services are so widely available in other parts of the world, as tourists come it's a service they'd expect. Furthermore, anything to increase competition with taxis is good for consumers.

Need to have more options available. It would also open up some opportunities for people to make some extra money.

Please note that I was not able to add text to question #2 (I think there's a problem with the form). My experience with rideshares across Canada and the USA has been wonderful. I like that you can choose your driver, you know who your driver is (there's a way to connect with them via your app), you know exactly how long and how much the ride will be, there is no exchange of cash, you can send your GPS tracking of your ride to friends. It is much safer, faster and more convenient than a taxi. As a woman, I appreciate having as much information as possible about who's car I'm stepping into.

Your field for Question #2 does not allow me to type anything in. So I'll do so here. I was a frequent user of Uber and Lyft in the cities where I lived prior to moving to Saint John. They were convenient

and their promotions and community work were also quite good. They have helped out in times of crisis and emergency with special offers. Also, their associated applications work far better than the sole purpose versions - ie Uber Eats works far better than Skip and Uber shopping forces better from Instacart. Please please please allow ridesharing apps in Saint John ASAP. I should also say that the policy of at least one taxi co in Saint John was not helpful during covid. We tried to use Carelton (with all safety protocols) to attend a testing site and they turned us away. Vet's taxi took us to the site. But this is all terrible and would never have been an issue with rideshare services with their policies and protocols.

Ride sharing gives people an option, right now with the struggles of transit and the lack of reliability with cab companies, ride sharing is exactly what the city needs. It also provides people with a way to make a couple extra bucks if they choose to. The city is extremely hard to get around for someone without a car, ride-sharing gives them an extra option and is far more accountable then a cab company.

All of the supposed benefits of Uber et all can also be achieved by free frequent transit with wide coverage. I would love to see a push in Saint John to replace drives with bus trips, and investing money into the transit system so that the bus is the easiest and cheapest way to get around. Ridesharing will lead to further gutting of an already paltry bus service - please make the forward thinking choice and say no.

It should be considered for outlying communities too. Rothesay, Quispamsis and Grandbay all need more rides.

Background checks even for rideshare drivers and vehicles meet inspection

I can't believe that the city is looking at this when public transit has not been improved. Really angry about this.

You should consider making this an affordable venture for someone to get into, to make a living and not have licensing fees, car age restrictions and other fees be so demanding that it is unaffordable or unrealistic. a two-car maximum per owner would stop uneven competition. Use the MVI rather that a vehicles age to determine suitability for service.

Return on Investment is key here.

This isn't a bleeding edge decision; Ride shares exist across Canada with countless data points on value and safety going back years. I'm hoping a major debate doesn't ensure before the city makes decisions on the best policies and requirements from other Canadian cities modeling ride-share success. Further, it supplements existing public transportation challenges. Lastly, I would hope the city decides to pursue a pre-existing rideshare service (E.g. Uber) vs creating their own system.

It is a good idea for Uber and Lyft to operate in Saint John.

I think, when ridesharing apps first came out, we were all amazed by the price. Now ridesharing apps have comparable pricing to taxis and are similar to taxis in that they are large companies trying to make a profit. They are handy, however, in terms of anyone being able to pick it up as an occupational supplement, and the lack of money needing to be exchanged in car. They are also useful for the shy and introverted. My personal preference would be to support a local ridesharing company - if such a one existed.

Person(s) driving should be screened/criminal record check before being permitted to drive for the ridesharing company

I think that ride sharing can be a very useful tool for Saint John

Let the private market do it’s thing and stay out of it .

I would gladly welcome Uber. Clean professional service I have used in Toronto, Montreal sand New York. The other great thing about those cities- the access to public transit. Something this city just does not support, and constantly cuts. Public transit needs better support before bringing in ride sharing. This would be better for the environment, easier on the roads. But the transit is not reliable for most people. The pandemic was a great excuse to make transit cuts, which I do not see returning. Disappointed tax payer here

Please, let's catch up with the times and allow ride sharing!!!

I feel that it is safer because you are tracked on the app. I also feel like it feels like a better service than regular cabs because the companies that run the ride sharing care about the reviews and the standards of the vehicles that the drivers are using. Therefore the drivers and the vehicles are always of the highest standards. The prices are cheaper typically and you get better service. I also like that you can order these services right from an app on your smartphone. And you also know the cost in advance when you book The Ride because you tell them where you're going which adds to the convenience of the ride-sharing app. I will 100% use the ride-sharing program and apps in Saint John.

We claim to be an IT city - we need to start acting like it. The current taxi industry is nothing worth protecting. Non smoking means tossing cigarette out of window when approaching you; dirty, noisy, unsafe cars; I've witnessed drivers drink from a flask from under seat; one had a salamander crawling over seat; taking longer routes for higher fares; charging improperly for tourists; bald tires; body odour. We need to embrace future modes of transportation and technology.

It would be great to have for the cruise ships coming in as well as at the airport as the travellers start moving around more. It makes SJ more accessible and progressive

I would encourage council not to cave to what will almost certainly be strong lobbying from the taxi businesses and alleged horror stories about ride sharing. We have an opportunity to not be governed by fear of the new and unfamiliar. I hope we accept this as the rest of the world has. Thank you.

Fair basic prices group sharing for cheaper commutes

Make sure they are clean inside and out same as the drivers. Having them share estimated cost of trip in the app.

I'm not sure that the city of our size can sustain, but I'm more likely to use ridesharing than I am to use a taxi or bus in our city.

Rideshare drivers should be registered.

Ridesharing allows individuals to create their own micro-businesses to supplement their own personal income - this entrepreneurial spirit should be encouraged. Also, the availability of ridesharing is key for newcomers both to setup and use, which is something we are encouraging as a city. Thank you.

Please give us people who have no access to the city transit a more cost effective way to get around.

Safety factor is a pro, creation of jobs for Saint John, proper competition in the market would help in better service from cab companies

I would spend more money uptown on weekends/evenings if I had an alternate way home that was reasonably priced. There are not enough taxis in Saint John to support the community. Sometimes I have waited 45 to 60 minutes for a taxi. With ride sharing, I know the location and timing of my ride. Also, with the cost of living rising, ride sharing will help off set the cost.

Optional question (72 response(s), 28 skipped)
Question type: Essay Question

April 1, 2022

Mayor Donna Reardon, City of Saint John
Mayor Dr. Nancy Grant, Town of Rothesay
Mayor Libby O'Hara, Town of Quispamsis
Mayor Brittney Merrifield, Town of Grand Bay-Westfield
Mayor Robert Doucet, Town of Hampton
Mayor Bette Ann Chatterton, Village of St. Martins

cc. John Collin, CAO City of Saint John, John Jarvie, CAO Town of Rothesay, Aaron Kennedy, Acting-CAO Town of Quispamsis, John Enns-Wind, CAO Town of Grand Bay-Westfield, Richard Malone, CAO Town of Hampton

Re: Adoption of Ridesharing Bylaws

Dear Regional Mayors,

Envision Saint John: The Regional Growth Agency is the sales, marketing, and support engine for the region – we are inviting people to visit, study, live and invest. Aligned with this work is our strategic focus on Growth Readiness – preparing our region for an influx of new visitors as travel starts to rebound and more residents and students as more people become aware of the amazing opportunities in our region and province.

Ridesharing companies like Uber and Lyft are table stakes in larger cities offering a convenient, efficient option for visitors and residents alike. As we look to attract more visitors, students to the region, immigrants, repatriate and attract new residents, our region must offer ridesharing as a transportation option to remain competitive. To accomplish this, it is critical that we adopt ridesharing municipal bylaws across the region to demonstrate we are a cohesive region with people living, working, and playing across communities.

Cruise passengers coming from the US and Europe, where ridesharing has been available for years, would have a new way to explore the region. And passengers arriving at YSJ would have an alternate, arguably more reliable, transportation option to reach their destination, no matter the time of day.

As more people embrace the need for environmental sustainability, ridesharing is a choice we must offer to support our desire to be a progressive, modern location to visit and live.

Sincerely,

Paulette Hicks

Paulette Hicks
CEO, Envision Saint John: The Regional Growth Agency

Received Date	April 13, 2022
Meeting Date	April 19, 2022
Open or Closed	Open Session

Mayor Donna Noade Reardon and Members of Common Council

Subject: Request to Purchase In-Person Ticket for FCM Annual Conference

Background:

The Federation of Canadian Municipalities will hold its 2022 Annual Conference and Trade Show in Regina Saskatchewan from June 2 to June 5. The cost of the in-person registration, if booked prior to April 22nd is $895 plus tax. After April 22nd, the cost of in-person registration increases to $1055 plus tax.

I am respectfully requesting that Council approve the cost of registration to this event so that I may attend in-person.

Motion:

RESOLVED that Common Council approve the request for funding for Councillor Joanna Killen for the registration costs to attend the FCM 2022 Annual Conference and Trade Show.

Respectfully Submitted,

(Received via email)

Joanna Killen
Ward 1 Councillor
City of Saint John

Received Date	April 14, 2022
Meeting Date	April 19, 2022
Open or Closed	Open Session

Mayor Donna Noade Reardon and Members of Common Council

Subject: Envision Saint John Quarterly Update

Background:

Motion:

That Envision Saint John be asked to attend an upcoming Common Council Meeting to provide a quarterly update.

Respectfully Submitted,

(Received via email)

Paula Radwan
Ward 4 Councillor
City of Saint John

COUNCIL REPORT

M&C No.	2022-118
Report Date	April 12, 2022
Meeting Date	April 19, 2022
Service Area	Utilities and Infrastructure Services

Her Worship Mayor Donna Noade Reardon and Members of Common Council

SUBJECT: **City of Saint John Public Transit and Fleet Low Carbon Migration Strategy**

AUTHORIZATION

Primary Author	Commissioner/Dept. Head	City Manager
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RECOMMENDATION

It is recommended that Common Council approve the following items:

1) Adopt the City of Saint John Public Transit and Fleet Low Carbon Migration Strategy dated March 28, 2022 as appended to M&C 2022-118 subject to approved budgets, and
2) Direct staff to apply to the Federation of Canadian Municipalities (FCM) under the Green Municipal Fund (GMF) for the Fleet and Transit Pilot Project.

EXECUTIVE SUMMARY

City Staff along with Wood Environment & Infrastructure Solutions has prepared the City of Saint John Public Transit and Fleet Low Carbon Migration Strategy which includes a roadmap to help the City reach net zero by 2040. The Strategy also includes key milestones for updates and an overall examination of the potential cost and savings generated with implementation.

The report seeks Council's approval to adopt the Strategy, as well as to direct staff to apply for funding under the Green Municipal Fund (GMF) and identifies that the use of pilot projects for new technology can aid in transition. The Federation of Canadian Municipalities also has a funding opportunity for pilot projects.

Accompanying, this report will include presentation by Wood Environment & Infrastructure Solutions regarding the proposed Strategy.

PREVIOUS RESOLUTION

M&C 2021-268- Public Transit and Fleet Green Strategy- Consulting Services
M&C 2019-107- City of Saint John Climate Change Action Plan.

M&C 2017-012 – Fleet Policy
M&C 2019-129 – Greening Our Fleet Policy

REPORT

BACKGROUND

The City of Saint John has been an early adopter of implementing innovative measures, policies, strategies, plans, etc. to address climate change adaptation and mitigation on the City's infrastructure, community, as well as the transportation sector.

In 2019, Common Council has approved the following GHG emissions targets for the City of Saint John Corporate GHG and Energy Action Plan:

1) Corporate GHG Emission Target of 30% by 2025 below 2015 levels and,
2) City of Saint John Corporate Operation to be Carbon Neutral by 2040.

The corporate GHG and Energy Action Plan has identified high-level strategies to reduce GHG emissions in the transportation sector, as the transportation sector represents over 35% of total GHG emissions.

The following are a list of action items strategies, which were included in the Corporate plan to reduce GHG emissions in the transportation sector:

- Fleet Downsizing
- Idle-free strategy
- Public Transit and Fleet Low-Carbon Strategy
- Training & Education

Fleet and Public Transit Operation

In the past years, City staff have been working diligently to implement the action items and strategies listed in the Corporate plan. The objectives of these measures are to reduce GHG emissions and fuel costs as well as maximize the life expectancy of the various vehicles.

The following measures have been implemented:

- Fleet Utilization Projects: 1.0, 2.0, and 3.0
- Automatic Vehicle Locating (AVL) Systems Installations
- Fleet Pooling installations
- "Greening Our Fleet" Policy Adoption
- Idling, Long Hauling, Zone, and Speeding Weekly Reporting

The implementation of these measures has resulted in 36% GHG emissions reduction below 2015 for the Public Transit and Fleet emissions.

CITY OF SAINT JOHN PUBLIC TRANSIT AND FLEET LOW CARBON STRATEGY

Analysis

To develop a low carbon migration strategy for City of Saint John fleet and Saint John Transit fleet, the City has engaged Wood Environment & Infrastructure Solutions in October 2021 to complete the work. The funding of the strategy is fully funded by the Province of New Brunswick Environmental Trust Fund.

The goal of the Public Transit and Fleet Low-Carbon Migration Strategy is to identify and evaluate potential reductions in greenhouse gas (GHG) emissions from the City of Saint John fleet and Saint John Transit fleet operations.

The results from the evaluation have been incorporated into the Carbon Migration Strategy Roadmap, which outlines actions for the City to take in achieving its corporate emission reduction targets, presented below:

City of Saint John	2025 Emission Target	2040 Emission Target
Public and Transit Fleet	30% below 2015 levels	Carbon neutral

The City of Saint John has assembled a working team to oversee the development of the strategy. The team consists of the following:

Saint John Working Committee

- Samir Yammine — City of Saint John
- Ian Fogan — City of Saint John
- Kevin Loughery — City of Saint John
- Marc Dionne — City of Saint John
- Tom Cusack — City of Saint John
- Charles Freake — City of Saint John
- Dana Young — Saint John Energy
- Todd Allen — Saint John Energy

Wood PLC Project Team

- Naeem Farooqi — Wood PLC
- Norman Hendry — Wood PLC
- Matthieu Goudreau — Wood PLC
- Abhishek Raj — Wood PLC
- Saravanan Kumar — Wood PLC
- Jamal Nureddin — Wood PLC
- Rick Baltzer — Wood PLC

Several webinars were held with the various city departments to provide their feedback on the proposed technologies and energy sources as well as the impacts on the day-to-day operation of the City of Saint John fleet and Saint John Transit fleet.

The team has conducted several data modeling, data collection and technical/financial analysis on the latest technologies including available energy sources to green the City of Saint John fleet and Saint John Transit fleet.

The Strategy has taken into consideration the long-term City of Saint John fleet and Saint John Transit fleet Strategy and required infrastructure as well as capital and operating costs implication to implement the proposed measures. Several consultations were held with various energy providers, Saint John Energy, municipalities across Canada and vehicles/buses manufactures to help develop a long-term dynamic strategy.

Major Benefits

The City transit and fleet low carbon migration strategy will have numerous economical and environmental benefits to the City:

Local Energy Expenditures – All diesel and gasoline consumed in Saint John is sourced from imported fossil fuels. This means a large percentage of the dollars expended on energy leave the city, the region, and the province. In contrast, the low-carbon strategy allows for the efficient use of renewal energy sources such as wind, ensuring almost all energy expenditures stay within the region.

Price Stability – The low carbon strategy allows the use of local energy sources such as wind energy to provide energy to the City fleet. This will help insulate the City from fuel price changes over time.

Decarbonization – The City is committed as part of their corporate GHG emissions and energy action plan to net zero by 2040. The proposed strategy is necessary to meet this commitment.

Electricity Supply Affordability & Peaking – The proposed strategy allows greater grid penetration for intermittent renewables, such as wind, on the electricity system while significantly reducing peaks in electricity demand. Therefore, allowing Saint John Energy to increase its direct installation of wind energy. With the low cost of wind electricity purchase and the use of this energy to fuel city fleet and saint john transit, this would increase revenue for Saint John Energy and make electricity more affordable for the City of Saint john.

Summary of Recommendations

The Carbon Migration Strategy Roadmap was developed to outline activities necessary to transition to a zero-emission fleet by 2040. It is divided into three phases, corresponding to short, medium, and long-term activities.

- Phase 1 is the shortest of the three phases with a 3-year duration, beginning in 2022 with anticipated completion by 2025. Phase 1 serves as a launching point to explore funding programs, partnerships, and leverage implementation opportunities. “Easy win” battery electric vehicles will begin to be adopted to introduce the new technology to City staff. Pilot programs will begin for the vehicles planned for adoption in Phase 2. During this time the City will work with hydrogen producers and the Atlantic Hydrogen Alliance to explore partnerships that could potentially make fuel-cell technologies more competitive.

- Phase 2 is five (5) years long from 2025 to 2030. During this time the next vehicle groups will begin their transition to battery electric alternatives, with the next round of pilots launching for vehicles identified for Phase 3. During this time the City's charging needs will exceed the available capacity at its fleet depot, necessitating electrical infrastructure upgrades. This significant investment should be sized accordingly to the portion of the fleet being electrified and any additional hydrogen fuel cell analysis should be completed before proceeding with any major infrastructure upgrades.
- Phase 3 is ten (10) years long from 2030 to 2040. During this time all remaining assets (vehicular and equipment) will need to be transitioned to zero-emission technologies. Actual progress should be compared to planned progress to understand any shortfall in meeting the 2040 net-zero emission goal. In particular, the rate at which the electrical grid decarbonizes will have the largest impact on reducing GHGs.

STRATEGIC ALIGNMENT

The Public Transit and Fleet Low Carbon Migration Strategy is aligned with the City of Saint John Climate Change Action Plan and with Council Priorities for Green: "We value the environment" and Move: "We value sustainable transportation choices."

SERVICE AND FINANCIAL OUTCOMES

The low carbon strategy has developed a long-term capital plan to implement the various phases. The successful implementation of these phases will depend on receiving funding from the various levels of government including non-government organizations. The City of Saint John has an opportunity to leverage capital funding from the new Zero Emissions Transit Fund (ZETF) and Green municipal Fund (GMF) toward the capital cost of several fleet and transit bus initiatives. The City of Saint John Finance Committee has considered and approved the application to the ZETF to help fund electric buses and related infrastructure. The decision on investment in fleet replacement is part of the Capital Budget process and the application to the ZETF does not change the process.

The proposed resolution also contemplates application to Federation of Canadian Municipalities to help fund pilot projects on new technology as identified in the strategy. The funding of pilot projects would be from operating budgets and does not require budget adjustments.

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

The following City departments were consulted during this process and preparation of the report: Utilities and Infrastructure Services, Public Works and Transportation Services, Strategic Services and Public Safety Services. Additionally, other energy providers, manufacturers, stakeholders such as Saint

John Energy, Liberty utility, Saint John Port, etc. were consulted during the development of the green strategy.

ATTACHMENTS

1. City of Saint John Public Transit and Fleet Low Carbon Migration Strategy
2. Presentation by Wood

SAINT JOHN

wood.

City of Saint John

Public Transit and Fleet
Low-Carbon Migration Strategy

28 March 2022



March 28, 2022

The City of Saint John

Public Transit and Fleet Low-Carbon Migration Strategy

Final Report

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Acknowledgements

Wood PLC would like to thank all members of the City of Saint John's working committee as well as stakeholders from Saint John Energy that participated in the development of the City of Saint John Public Transit and Fleet Low-Carbon Migration Strategy. The collaboration, support and insight of all stakeholders and working committee members enabled the success of this project, laying the foundation roadmap for the Saint John's migration to a sustainable future.

Saint John Working Committee	
Samir Yammine	City of Saint John
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1.0 Executive Summary

1.1 Goals of the Low-Carbon Migration Strategy

The goal of the Public Transit and Fleet Low-Carbon Migration Strategy was to identify and evaluate potential reductions in greenhouse gas (GHG) emissions from the City's public and transit fleet operations. The results from the evaluation have been incorporated into the Carbon Migration Strategy Roadmap, which outlines actions for the City to take in achieving its corporate emission reduction targets, presented below:

City of Saint John	2025 Emission Target	2040 Emission Target
Public and Transit Fleet	30% below 2015 levels	Carbon neutral

1.2 Recommended Pathway to Achieve City Climate Goals

The review of the City's current operations revealed that the 2021 Public and Transit Fleet emissions were 36% below the 2015 baseline. Therefore, the City had already achieved its short-term target and now needed to focus on how to achieve its long-term transition to carbon neutrality.

From the time of this report's publication, the City has 18 years to transition its entire fleet to a new low-carbon technology. To determine the preferred technologies for achieving the City's 2040 emission target, a Green Fleet Plan (GFP) was created to compare multiple adoption scenarios. The first scenario, business-as-usual, modeled the continued procurement of diesel and gasoline vehicles and was compared with three (3) scenarios (#2, #3, and #4) that incorporated low- and zero-emission technologies. All scenarios assumed that the storage of Public and Transit fleets would be consolidated at the City's 55 McDonald street depot. Furthermore, hydrogen procurement was limited to zero-emission "green" hydrogen, and the electrical grid carbon emission intensity was forecasted to linearly decarbonize to zero-emissions by 2035, in line with recent federal targets.

- In Scenario #2 – BEV (Battery Electric Vehicles), battery electric vehicles were the primary technology used to reach zero emissions. The primary fuel used will be energy purchased from Saint John Energy and will require the deployment of significant electric vehicle charging equipment and expansions to the electrical infrastructure.
- In Scenario #3 – FCEV (Fuel-Cell Electric Vehicles), hydrogen fuel-cell vehicles were the primary technology used to reach the zero-emission goal. The primary fuel used will be hydrogen purchased from a private gas utility (or utilities) and required the deployment of a hydrogen refuelling station at the City's depot. The hydrogen fuelling partner(s) will deliver green hydrogen to site such that no emissions are attributed to City operations. Additionally, the depot needed significant modifications to safely accommodate the hydrogen fuel-cell vehicles.
- Scenario #4 – CNG (Compressed Natural Gas) to BEV involved a deployment of CNG vehicles for the Class 6, 7, and 8 Truck Platform vehicle group. This vehicle group was identified for the opportunity as few green alternatives exist that can meet the service needs of the group, meaning that a CNG deployment may have been worthwhile in lowering emissions and costs while waiting for zero-emission technologies to be developed. This involved the deployment of a CNG refuelling station and facility modifications to safely accommodate the deployment CNG vehicles.

The analysis of GFP results revealed that battery-electric technology was preferred, as it outperformed hydrogen fuel-cell technologies in terms of financials (Table 1.1, below), opportunities, and risks (Section 6.0). Note that additional sensitivity scenarios were analyzed to evaluate other implementation strategies and test assumptions. Examples of additional scenarios include varying the price of fuel/energy and operating a mixed fleet of battery electric and hydrogen fuel-cell vehicles. These results supported the

findings of the scenarios presented above.

Table 1.1 GFP Net Present Value Comparison

City of Saint John Green Fleet Strategy	Scenario Results (NPV)			
Scenario Summary [Gross Costs]	**Saint John BAU**	**BEV**	**FCEV**	**CNG to BEV**
Model Duration	2022-2040	2022-2040	2022-2040	2022-2040
Total	**225,845,226**	**213,886,615**	**267,798,511**	**214,746,589**
NPV GHG Comparison	**100.0%**	**94.7%**	**118.6%**	**95.1%**
NPV Difference		**-5.3%**	**18.6%**	**-4.9%**

Emission reductions between 2022 and 2040 were similar between each green scenario, all of which achieved carbon neutral emissions by 2040 (Table 1.2.)

Table 1.2 GFP Gross Emission Comparison

City of Saint John Green Fleet Strategy	Scenario Results (Real)			
Scenario Summary [Gross Emissions]	**Saint John BAU**	**BEV**	**FCEV**	**CNG to BEV**
Gross Public Fleet Emissions [Tonne CO2]	32,689	22,845	22,766	22,113
Gross Transit Fleet Emissions [Tonne CO2]	42,040	13,737	13,299	13,737
Total	**74,729**	**36,582**	**36,065**	**35,850**
Sub-totals	**100.0%**	**49.0%**	**48.3%**	**48.0%**
Difference		**-51.0%**	**-51.7%**	**-52.0%**

Figure 1 below presents the financial and environmental results from each scenario graphically.

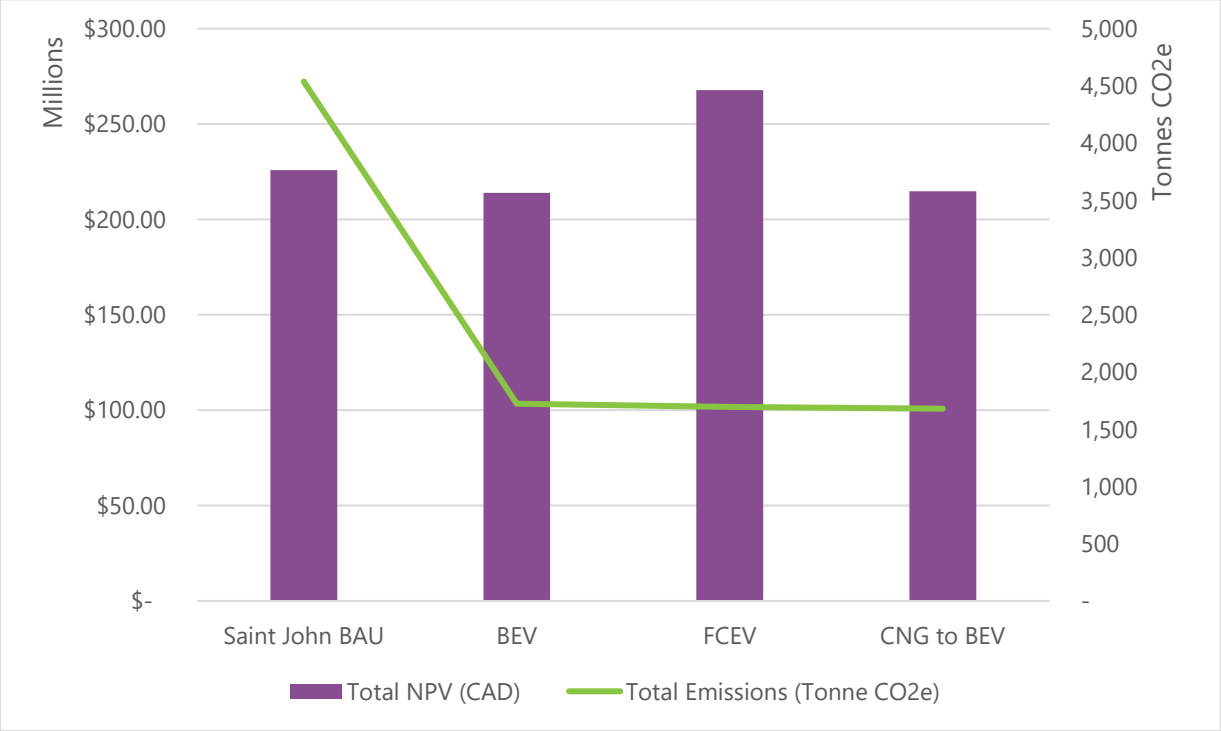


Figure 1 GFP Scenario NPV and Emission Comparison

The Carbon Migration Strategy Roadmap was developed to outline activities necessary to transition to a zero-emission fleet by 2040. It is divided into three phases, corresponding to short-, medium-, and long-term activities.

- Phase 1 is the shortest of the three phases with a 3-year duration, beginning in 2022 with anticipated completion by 2025. Phase 1 serves as a launching point to explore funding programs, partnerships, and leverage implementation opportunities. "Easy win" battery electric vehicles will begin to be adopted to introduce the new technology to City staff. Pilot programs will begin for the vehicles planned for adoption in Phase 2. During this time the City will work with hydrogen producers and the Atlantic Hydrogen Alliance to explore partnerships that could potentially make fuel-cell technologies more competitive.
- Phase 2 is five (5) years long from 2025 to 2030. During this time the next vehicle groups will begin their transition to battery electric alternatives, with the next round of pilots launching for vehicles identified for Phase 3. During this time the City's charging needs will exceed the available capacity at its fleet depot, necessitating electrical infrastructure upgrades. This significant investment should be sized accordingly to the portion of the fleet being electrified and any additional hydrogen fuel cell analysis should be completed before proceeding with any major infrastructure upgrades.
- Phase 3 is ten (10) years long from 2030 to 2040. During this time all remaining assets (vehicular and equipment) will need to be transitioned to zero-emission technologies. Actual progress should be compared to planned progress to understand any shortfall in meeting the 2040 net-zero emission goal. In particular, the rate at which the electrical grid decarbonizes will have the largest impact on reducing

The roadmap is presented in full on page 14. More context regarding implementation opportunities and next steps have been identified in Section 8.0. The opportunities and next steps explored have been organised into five (5) themes, for which an overview of their content is presented below.

8.3.1. Continuous Improvements

This theme explores updates to the Public Transit and Fleet Low-Carbon Migration Strategy, such as:

- Green Technology Adoption: what is the City progress in implementing its planned adoptions?
- Technological Progress: how are technologies maturing compared to City predictions?
- Financial Performance: are the operational savings of zero emission technologies being realized?

8.3.2. Implementation Opportunities

This theme explores opportunities for the City to further improve its zero-emission vehicle adoption plan through partnerships and phasing. This is in recognition to the strengths of the new vehicle technologies and supporting infrastructure that can be utilized for alternative functions for which GHG systems have no equivalent functionality. This includes the following topics:

- Phased Infrastructure Implementation
- Phased Tooling Implementation
- Procurement Opportunities
- Electrical Optimization and Resilience Opportunities
- Electrical Utility Opportunities
- Fleet Opportunities
- Community Emission Goal Opportunities

8.3.3. Piloting Programs

This theme explores which vehicles the City should begin piloting and what key performance metrics (KPI) should tracked as part of each pilot. An overview of KPI are provided below:

- Utilization – how many kms are driven
- Availability – number of days ready for service
- Infrastructure availability – number of days ready for use
- Vehicle availability – Mean distance between road calls
- Charger reliability – Number of days unavailable for use – warranty issues
- Cost per km – Energy costs per km driven collated to fuel cost savings
- Environmental Impact – Emissions reduction, value of carbon savings
- Equity and Environmental – Kms driven through these areas

The roadmap recommends piloting the vehicle groups and equipment in the following phases.

Phase 1	Phase 2	Phase 3
• Class 2 – Light Duty Pickup Truck • Class 7 – Streetsweeper • Class 8 – Refuse Truck	• Class 1 – Police Cruiser • Class 3, 4, & 5 – Heavy Duty Pickup Truck • Class 6, 7, & 8 – Heavy Duty Truck Platform • Class 8 – Pumper Fire truck	• Excluded asset classes: construction equipment, armored vehicles, etc. • Pilot zero-emission tools and equipment (Optional)

8.3.4. Staff Readiness

This theme explores the steps that should be taken to manage the change in operations with regard to City stakeholders. This includes internal stakeholders such as user groups and staff, and external stakeholders such as partnering firms/agencies and the public.

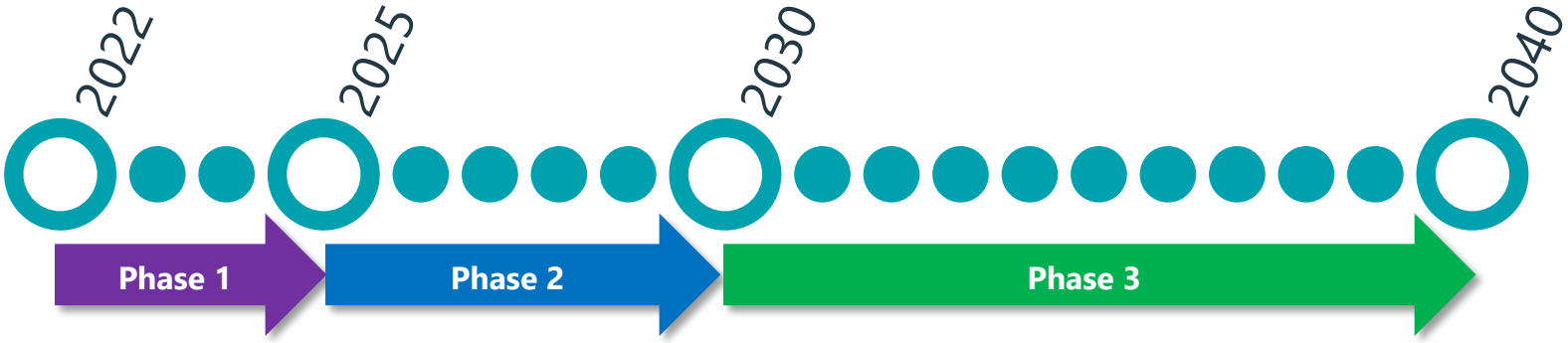
Specific guidance is provided for anticipated labour negotiations and for training packages that City staff will required to safely work with battery electric vehicles.

8.3.5. Facility Modifications

This theme explores the range of facility modifications that are recommended to accommodate battery electric vehicles. This includes physical changes to the City's depot to accommodate the size and needs of the vehicles, as well recommended locations for the charging equipment. These items have been organised into the following topics:

- Vertical Clearances
- Electrical Infrastructure
- Candidate Power Control Unit Locations
- Primary Dispenser Locations
- Auxiliary Dispenser Locations
- Static Free Workplaces and Storage
- Staff Spaces
- Additional Modifications

1.3 Carbon Migration Strategy Roadmap (Phases 1, 2, and 3)



Phase 1	Phase 2	Phase 3
• Begin grant/funding applications. • Implement PHEV and BEV for General Purpose Vehicles. Implement HEV for Police and heavy-duty vehicles. Implement BEV for the transit fleet. • Pilot BEV light-duty trucks, street sweepers, and refuse trucks. • Explore green fleet transition opportunities (public charging, on-demand transit, community targets). • Explore external partnerships and investments that would make FCEV technologies competitive with BEV.	• Review/update migration plan to review the competitiveness of hydrogen technologies. • Implement electrical utility upgrades/expansions. • Implement BEV for light-duty trucks, street sweepers, and refuse trucks. • Pilot BEV for remaining vehicles classes. • Expand market scan to remaining assets (equipment/construction/off-road).	• Review/update migration plan to review planned vs actual progress of the migration plan. • Implement additional electrical utility upgrades/expansions. • Implement BEV for remaining vehicles classes. • Implement zero-emission solutions for City equipment, construction, and off-road assets. • Review the progress of electrical grid decarbonization. Consider options to offset carbon should the grid fail to achieve carbon neutrality by 2035.

2.0 Introduction

2.1 Background

Climate Change is one of the greatest challenges facing humanity today. As a coastal city, sea-level rise is of great concern for Saint John. Other challenges include increasing temperature and higher intensity precipitation events. This directly results in severe flooding, coastal erosion, and loss of land. To counter this, Saint John has become a pioneer in implementing a range of policies and strategies to address the impact of climate change and adapt itself to these changes.

To mitigate the climate change impact, the City of Saint John's (the City) Common Council approved its Climate Change Action Plan. The Action Plan has identified some high-level Green House Gas (GHG) emission reduction strategies in the transportation sector. The Action Plan has separate GHG and Energy Action Plan for both the Corporate and the Community, which are detailed below.

City of Saint John	2025 Emission Target	2035 Emission Target	2040 Emission Target
Corporate	30% below 2015 levels	-	Carbon neutral
Community	9% below 2015 levels	18% below 2015 levels	-

Additionally, the City has also implemented several fleet management strategies like Optimum replacement procedure, Idling policy and fleet monitoring systems.

The City understands that transportation is a major contributor to GHG emissions. The City's transportation sector accounts for more than one-third of total GHG emissions. To meet the goals outlined in the Climate Change Action Plan, the City plans to implement low- and zero-emission technologies in its public and transit fleets. This is to be achieved by transitioning the vehicles to a mix of technologies like electric, hybrid-electric, compressed natural gas, or hydrogen. Additionally, the City aims to review and update its policies, measures, technologies, and installing telematics in the transit buses. This has all been in service of aiding the City to identify appropriate actions to increase operating efficiency, maintain levels of service, and achieve its climate change mitigation goals.

2.2 Goals of the Low-Carbon Migration Strategy

The goal of the Public Transit and Fleet Low-Carbon Migration Strategy was to identify and evaluate potential reductions in greenhouse gas (GHG) emissions from the City's public and transit fleet operations. The results from the evaluation have been incorporated into the Carbon Migration Strategy Roadmap, which outlines actions for the City to take in achieving its corporate emission reduction targets. The applicable targets for the Public and Transit Fleet are presented below:

City of Saint John	2025 Emission Target	2040 Emission Target
Public and Transit Fleet	30% below 2015 levels	Carbon neutral

The 2025 emission target was considered the short-term goal, whereas the 2040 target for carbon neutrality (or net zero-emissions) was considered the long-term goal. The Low-Carbon Migration Strategy sought to achieve these goals through the implementation of low- and zero-emission vehicles. This implementation would be mapped using a roadmap indicating major transition milestones up to the 2040 target.

2.3 Methodology Summary of the Low-Carbon Migration Strategy

This began through an assessment of the current state of City operations, with a focus on fleet mix and performance requirements. Following the review of the current state, a market scan of available technologies was performed to identify what low- and zero-emission products were currently available on the market. A key piece of the market scan was aimed at understanding the performance opportunities and limitations of each technology to support user group discussions regarding technology readiness. A landscape review was performed to understand the actions taken by similar municipalities, such that lessons learned could be leverage by Saint John. Furthermore, the landscape scan extended to transit deployments of zero-emission buses, some of which had publicly published the findings of their deployments.

With the results of the City's current state, the market scan, and the landscape scan, the project proceeded to a future state analysis. A key component of the future state analysis was to consult with the City's user groups, the fleet managers from throughout the City departments that operate vehicles. This allowed for each proposed low- and zero-emission technology to be discussed in terms of the needs of each user group, allowing for a forecast of when technologies are expected to mature to the point where they can be incorporated into the fleet. These discussions were structured in terms of the opportunities, constraints, and risks of each technology such that solutions could be developed that would mitigate negative aspects of each technology while leveraging its strengths. These consultations were extended to relevant external stakeholders, namely electric and gas utilities, such that fuel availability and resiliency could be considered.

The forecast of when technologies could begin their adoption into the City fleet was used to generate a transition pathway to reach the City's emission goals. This pathway was analysed using a Green Fleet Plan which assessed implementing different low- and zero-emission technologies to understand their associated capital costs, operational costs, and emission reductions. This allowed the City to compare the performance of different technologies to select a technology mix that best suited the City's needs. The additional benefit from the Green Fleet Plan analysis is that major milestones, such as electrical utility upgrades, could be forecasted in terms of cost and timing.

The preferred technology had a roadmap developed that sought to realize as many benefits as possible, while mitigating risks. Continued discussions for partnership opportunities and external funding are included in the process. Vehicle piloting programs are prominent in the plan as they are critical for identifying gaps between existing technology and proposed low- and zero-emission technologies. Another consideration for the roadmap was to provide flexibility in the recommended next steps which would allow the City to adapt the plan should different technologies become more competitive in the future. This is accomplished by flagging opportunities to review competing technologies in advance of infrastructure commitments that require significant investment.

The implementation opportunities section was developed to provide additional context for the action outlined in the roadmap. These opportunities were categorized into five themes: Continuous Improvements, Implementation Opportunities, Piloting Programs, Staff Readiness, and Facility Modifications.

Transit route modelling was performed as an immediate next step to the Low-Carbon Migration Strategy Findings. The modelling assessed the feasibility of current battery electric buses to best understand which routes could be served by the new technology. Additional benefits of the modelling would be to understand the specific vehicle specification necessary to best deliver service, in addition to quantifying the equipment and infrastructure necessary to support the deployment. The results of the route modelling analysis are provided in Appendix B.

3.0 Current State

This section will assess and summarize the current state of the City's key facilities, fleet size and mix, operations, and environmental baseline. The development of this section involved a data request from the City, including information from Saint John Energy. Additional stakeholders were consulted on an as-needed basis throughout the engagement. The Wood Project team also conducted user group surveys and consultations with representation from all impacted fleets.

The following sections outline City of Saint John's current state across its facilities, fleet, and current environmental emissions.

3.1 Key Facilities

The City of Saint John has facilities in 69 different locations which includes parks, community centres, fire stations, vehicle maintenance facilities, and offices. The focus of this study would be where the municipal and transit fleet vehicles are operated and maintained to enable the development of a green fleet plan. This would include locations where the fleet vehicles are parked most of the time such as the City Hall. This section briefly summarizes the current state of the following three key facilities.

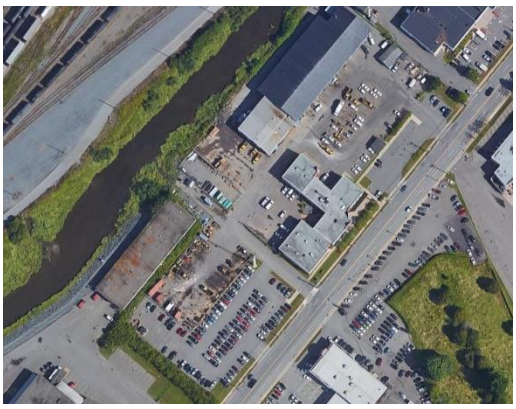
1. City Hall
    a. Building at 15 Market Square
    b. Parking Garage at 17 Chipman Hill
2. Public fleet Operations
    a. Building and Garage at 175 Rothesay Avenue
3. Transit Fleet Operations
    a. Building and Garage at 55 McDonald Street

3.1.1 City Hall

The City of Saint John's City Hall is located at 15 Market Square and the building's parking garage is located at 17 Chipman Hill, adjacent to the City Hall on the south. The City Hall hosts multiple departments of the City and there are some public fleet vehicle users based out of the City Hall. The City's Fleet Management department currently operates a few general-purpose vehicles such as sedans and SUVs from the City Hall. The City does not own any yard or spaces near the City Hall which can be used for operating the City's public fleet. The City and the Fleet Management department have indicated potential for short-term deployment of light-duty chargers in the City Hall that could be utilized by both public fleet vehicles and staff's own electric vehicles.

3.1.2 175 Rothesay Avenue – Public Fleet Operations

The City of Saint John has a fleet facility at 175 Rothesay Avenue where most of the public fleet vehicles excluding the transit fleet vehicles are stored and maintained. The core of the public fleet operations is at the Rothesay Avenue facility where the City's Fleet Management department functions. Based on inputs from the City, the Rothesay Avenue facility is currently at capacity and cannot accommodate any growth to the public fleet. The City has also indicated that it is not interested in making any facility upgrades or modifications to the Rothesay Avenue facility to accommodate the future green fleet vehicles.



3.1.3 55 McDonald Street – Transit Fleet Operations

Saint John Transit, the public transit agency serving the City of Saint John operates and maintains its transit fleet vehicles from the 55 McDonald Street facility. All transit functions such as service planning, scheduling, fleet daily servicing, and maintenance are performed at the McDonald facility. Currently, Saint John Transit operates forty-seven (47) conventional 40-foot diesel buses from the McDonald facility. There are also ten (10) smaller transit vehicles and two (2) service trucks that are operated and maintained from this facility. The City of Saint John identified that the McDonald facility has abundant space and electrical power, much more than what the transit fleet requires. This includes 550 kW of additional electrical capacity that can be utilized by future electric vehicles without the need for any utility upgrades (i.e., transformers/power lines). The City has also indicated a preference to transition all public fleet vehicle operations from the Rothesay Avenue facility to the McDonald Street facility. The City provided input that the McDonald facility is also better positioned in case of future expansion requirements to accommodate a larger fleet.



3.2 Public fleet

The City of Saint John currently operates a total of 300 public fleet vehicles. This includes vehicles operated by the various City departments, Police, and Fire and Emergency Services. The public fleet vehicles are managed by the Fleet Management department which is responsible for the entire lifecycle of the fleet assets including purchase, maintenance, utilization monitoring, and disposition.

3.2.1 Fleet Inventory and Mix

The City of Saint John's 300 public fleet are distributed across various fleet functions and user groups. Vehicle classes were used to help identify the vehicle mix in the fleet and by user group. The vehicle classes are set according to the Gross Vehicle Weight Rating (GVWR) of the vehicle, which is the maximum weight a vehicle is designed to carry including the net weight of the vehicle with accessories, plus the weight of fuel, passengers, and cargo. The range of vehicle weight classes and the City's public fleet count by each vehicle class are summarized in Table 3.1.

To further refine the fleet classification, Wood classified the public fleet vehicles into vehicle groups based on vehicle classes and the fleet functions as shown in Table 3.2. Unlicensed vehicles and other vehicles considered out of scope for this study were classified into the "Misc. (out of scope)" group.

Table 3.1 Vehicle Class by GVWR (lbs)

Vehicle Class	Min Weight (lbs)	Max Weight (lbs)	Fleet Count
Class 1	N/A	< 6,000	87
Class 2	6,001	10,000	74
Class 3	10,001	14,000	17
Class 4	14,001	16,000	15
Class 5	16,001	19,500	32
Class 6	19,501	26,000	7
Class 7	26,001	33,000	5
Class 8	> 33,001	N/A	63
Total	-	-	**300**

Table 3.2 Vehicle Grouping by Function and Class

Vehicle Group	Class and Function	Fleet Count
Group 1	Class 1 General Purpose	46
Group 2	Class 1 Police Cruiser	23
Group 3	Class 2 Light Duty (LD) Pickup Truck	73
Group 4	Class 3, 4 & 5 Heavy Duty (HD) Pickup Truck	39
Group 5	Class 6, 7 & 8 Truck Platform	32
Group 6	Class 7 Streetsweeper	2
Group 7	Class 8 Pumper Fire Truck	12
Group 8	Class 8 Refuse Truck	10
Misc. (out of scope)	Graders, Backhoes, Loaders, Forklift, Unlicensed, etc.,	63
Total	**-**	**300**

The City's public fleet has 54% of the fleet running on gasoline and the remaining 46% running on diesel as shown in Figure 2.

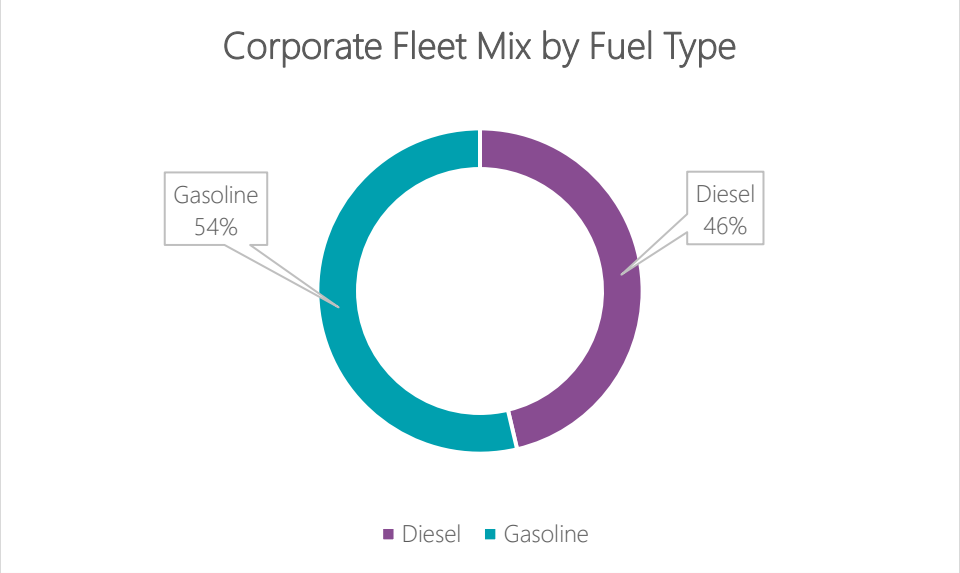


Figure 2 Number of Vehicles by Fuel Type

3.2.2 User Groups

While the public fleet vehicles are managed by the Fleet Management department, most of the vehicles are assigned to various City departments. Some of the public fleet vehicles are classified as "Pooled" vehicles which are assigned to the "Public Works and Transportation - Fleet Management" category. The

pooled vehicles are assigned to the different City departments on a rotational basis or as required. Wood analysed the Fleet Inventory document provided by the City's Fleet Management department and identified the following user groups. Please note that Public Works and Transportation (PW&T) department has been further divided into Fleet Management, Public Works, Roadway & Surface Maintenance, and Solid Waste Collection based on functionality for this study. The different public fleet user groups are shown below:

- Fire & Emergency Services
- Police
- Pooled Vehicles
- PW & T - Fleet Management
- PW & T - Public Works
- PW & T - Roadway & Surface Maintenance
- PW & T - Solid Waste Collection
- Saint John Water
- Transportation & Environment
- U & I - Infrastructure Asset Management

The public fleet vehicle split across the different user groups is shown in Figure 3.

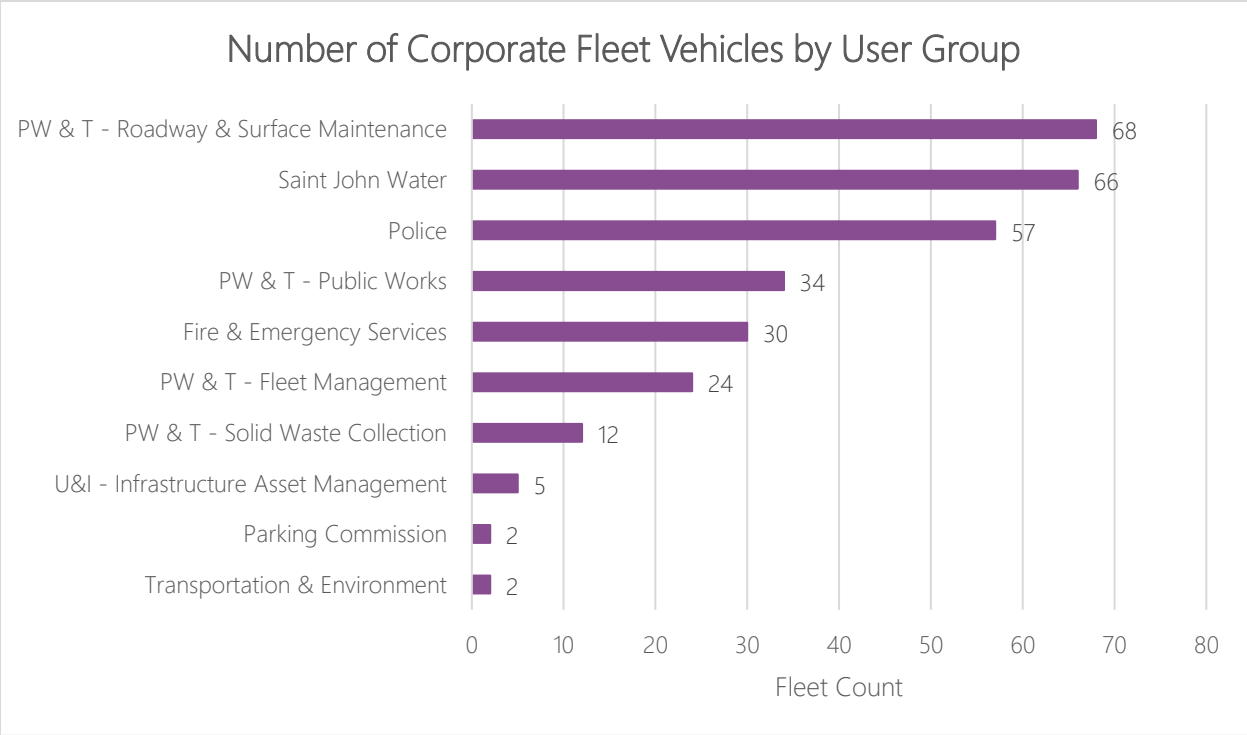


Figure 3 Number of Vehicles by User Group

PW & T – Roadway & Surface Maintenance, Saint John Water, and Police use a majority of the public fleet vehicles as can be seen in Figure 3. Wood also performed a fuel consumption analysis for the period 2018 – 2021. This analysis did not include the Police vehicles and a summary of this analysis is shown in Table 3.3. The fuel consumption analysis shows that PW & T – Roadway & Surface Maintenance, and Saint John Water consume the most fuel. While PW & T – Solid Waste Collection has only 12 fleet vehicles of the overall 300 vehicles, they stand second in terms of fuel consumption. There are 10 refuse trucks in this fleet of 12 vehicles operated by PW & T – Solid Waste Collection, the remaining two vehicles being one pickup truck and one SUV. This is in line with the expectation that the refuse trucks will consume fuel at a higher rate compared to other fleet vehicles due to more frequent start and stop operation, lower average speed, and the use of the power take off (PTO) for the hydraulics.

Table 3.3 Average Annual Fuel Consumption (litres) by Public fleet User Group

Public fleet User Group	2018	2019	2020	2021
PW & T - Roadway & Surface Maintenance	276,831	271,974	220,963	225,632
PW & T - Solid Waste Collection	173,083	173,832	169,545	169,050
Saint John Water	57,116	182,514	207,723	213,140
PW & T - Public Works	44,943	46,275	47,438	45,162
Fire & Emergency Services	-	3,772	23,327	24,285
PW & T - Fleet Management	3,709	10,387	13,171	18,704
U&I - Infrastructure Asset Management	440	7,058	5,718	7,536
Pooled Vehicles	2,628	7,055	5,874	-
Transportation & Environment	2,683	405	3,648	-

3.2.3 Fleet Operating Statistics

This section presents the key fleet operating statistics of the City of Saint John's public fleet vehicles such as average annual distance, fuel efficiency, and useful life by each vehicle group and user group. Please note that Wood identified there were several data gaps during the review of the City's current state which was attributed to the November 2020 cyberattack on the City's network. This cyberattack disabled many City systems that had to be restored and information across the network was lost in the process. This made a detailed fleet data analysis for the period 2016-2021 difficult.

Table 3.4 Average Annual Distance (km) by Vehicle Group

Vehicle Group	Class and Function	2018	2019	2020	2021
Group 1	Class 1 General Purpose	4,583	5,447	6,060	6,094
Group 2	Class 1 Police Cruiser	-	-	-	-
Group 3	Class 2 LD Pickup Truck	13,376	12,106	14,697	15,598
Group 4	Class 3, 4 & 5 HD Pickup Truck	16,272	13,402	15,792	13,189
Group 5	Class 6, 7 & 8 Truck Platform	15,240	13,547	9,829	12,496
Group 6	Class 7 Streetsweeper	7,715	7,648	10,222	9,029
Group 7	Class 8 Pumper Fire Truck	-	199	4,106	3,182
Group 8	Class 8 Refuse Truck	18,816	18,924	19,480	19,623

The source data for this analysis was derived from the City of Saint John's fleet telematics provider, GeoTab's online database. Table 3.4 presents the average annual distance (km) for each vehicle group. Please note that the mileage information for the "Group 2 – Class 1 Police Cruiser" was not available for this analysis since the Police Fleet Information are stored in an independent database. It can be found that

the "Group 8 – Class 8 Refuse Trucks" travel the most distance annually compared to other fleet vehicles. Each Refuse Truck travels approximately 19,000 km consuming 16,900 litres of diesel each year.

Table 3.5 Average Annual Fuel Efficiency (kmpl) by Vehicle Group

Vehicle Group	Class and Function	2018	2019	2020	2021
Group 1	Class 1 General Purpose	13.16	11.52	9.98	8.81
Group 3	Class 2 LD Pickup Truck	5.39	5.30	5.22	5.39
Group 4	Class 3, 4 & 5 HD Pickup Truck	3.49	3.50	3.74	3.75
Group 5	Class 6, 7 & 8 Truck Platform	1.55	1.59	1.54	1.56
Group 6	Class 7 Streetsweeper	2.16	2.24	2.36	2.59
Group 7	Class 8 Pumper Fire Truck	-	2.20	3.53	3.11
Group 8	Class 8 Refuse Truck	1.09	1.09	1.18	1.19

Table 3.5 shows the average annual fuel efficiency in kilometres per litre of fuel by each vehicle group. It can be found that the "Group 1 – Class 1 General Purpose" vehicles are the most fuel efficient and "Group 8 – Class 8 Refuse Truck" are the least fuel efficient. The "Group 5 – Class 6, 7, & 8 Truck Platform" vehicles are the second least fuel efficient vehicles.

Table 3.6 Average Annual Distance (km) by User Group

User Group	2018	2019	2020	2021
Fire & Emergency Services	-	1,272	5,948	5,897
Pooled Vehicles	5,685	7,356	5,017	-
PW & T - Fleet Management	4,389	9,423	11,585	20,311
PW & T - Public Works	12,960	12,713	12,751	12,802
PW & T - Roadway & Surface Maintenance	16,094	15,214	14,516	14,588
PW & T - Solid Waste Collection	18,816	17,362	18,881	18,944
Saint John Water	14,124	10,908	13,054	13,284
Transportation & Environment	10,314	3,773	11,794	-

Table 3.6 shows the average annual distance travelled by each user group's fleet vehicles.

Table 3.7 Expected Vehicle Useful Life by Vehicle Group

Vehicle Group	Class and Function	Assessment Age	Expected Useful Life
Group 1	Class 1 General Purpose	6	10
Group 2	Class 2 LD Pickup Truck	3	6
Group 3	Class 3, 4 & 5 HD Pickup Truck	6	10
Group 4	Class 6, 7 & 8 Truck Platform	7	6
Group 5	Class 7 Streetsweeper	12	10
Group 6	Class 8 Pumper Fire Truck	12	12
Group 7	Class 8 Refuse Truck	15	10
Group 8	Class and Function	12	13

Table 3.7 shows the vehicle assessment age and the expected useful life for the public fleet vehicles by each vehicle group. The City of Saint John has an internal policy to evaluate the condition of each fleet vehicle after the assessment age. This assessment will determine the appropriate maintenance or overhaul required to keep the fleet vehicle in good state of health. This assessment will also decide whether a fleet vehicle needs to be replaced.

3.3 Transit Fleet

Saint John Transit is the public transit agency serving the City of Saint John. Established in 1979, Saint John Transit is the largest public transit system in the province in terms of both ridership and mileage. Saint John's Transit system handles approximately about 2.5 million passengers per year. Saint John's Transit Fleet consists of predominantly conventional 40-foot diesel buses. Saint John Transit's fleet includes ten (10) smaller transit vehicles, two (2) non-revenue service vehicles, and two (2) service trucks. The focus of this study would be transition Saint John Transit's the conventional buses to low/zero carbon propulsion technologies.

3.3.1 Services

Saint John Transit currently provides both conventional fixed-route and on-demand paratransit services. Saint John Transit provides services 7 days a week with a network of main and feeder routes that connects four (4) major hubs throughout the City. Saint John Transit also provides the Comex, a rapid transit service providing fast commuter bus service. The commuter bus service runs Monday to Friday connecting Rothesay and Quispamsis to uptown in the morning and the opposite direction in the after-work service.

- Fixed conventional routes
- On-demand paratransit
- Exploring "conventional" on-demand transit hybrid model

3.3.2 Fleet Mix

As mentioned before, Saint John Transit's fleet is predominantly made up of conventional 40-foot transit buses. Table 3.8 shows Saint John Transit's fleet inventory with the acquisition year, model, current age, and vehicle count. Likewise, Table 3.9 shows Saint John Transit's specialized transit fleet inventory. Saint John Transit currently has forty-seven (45) conventional 40-foot diesel buses out of which five (5) are inactive. The transit roster includes two (2) articulated 60-foot diesel buses "Nova Bus LFS Artics", both of

which are inactive and in the process of being retired. The revenue fleet also has two (2) gasoline and eight (8) diesel paratransit buses. Saint John Transit's non-revenue fleet includes two (2) Ford F350 service trucks and two (2) Chevrolet Equinox service vehicles.

Table 3.8 Conventional Diesel 40' Transit Fleet Inventory

S. No	Acquisition Year	Model	Current Age	Vehicle Count
1	2002	OBI Orion VII	19	2
2	2004	OBI Orion VII	17	2
3	2005	OBI Orion VII	16	2
4	2004	OBI Orion VII	17	1
5	2006	OBI Orion VII	15	3
6	2007	OBI Orion VII NG	14	11
7	2008	OBI Orion VII NG	13	4
8	2010	OBI Orion VII NG	11	3
9	2012	OBI Orion VII EPA10	9	2
10	2015	Nova Bus LFS	6	2
11	2016	Nova Bus LFS	5	1
12	2018	Nova Bus LFS	3	12
Total			**-**	**45**

Table 3.9 Specialized Transit Fleet Inventory

S. No	Acquisition Year	Model	Current Age	Vehicle Count
1	2008	Ford E-450 / Diesel	13	1
2	2009	Ford E-450 / Diesel	12	2
3	2011	Chevrolet 4500 / Diesel	10	1
4	2012	Chevrolet 4500 / Diesel	9	1
5	2013	Chevrolet 4500 / Diesel	8	1
6	2014	Chevrolet 4500 / Diesel	7	1
7	2015	Chevrolet 4500 / Diesel	8	1
8	2019	Ford E-450 / Gasoline	2	2
Total			**-**	**10**

Currently, Saint John Transit does not have detailed digital fuel consumption and annual mileage records due to IT system migration issues. Hence, Wood has not presented the Transit Fleet's Operating Statistics. Based on inputs from Saint John Transit staff, the conventional 40-foot transit buses have an average fuel efficiency of 1.95 kilometre per litre (kmpl) and average annual mileage of 38,550 km. Conversely, the specialized 28-foot transit buses have an average fuel efficiency of 3.28 kilometre per litre (kmpl) and average annual mileage of 16,500 km.

Table 3.10 Expected Vehicle Useful Life by Vehicle Group

Vehicle Group	Class and Function	Assessment Age	Expected Useful Life
Group 9	40' Conventional Transit Bus	NA	12
Group 10	28' Specialized Transit Bus	NA	8

Table 3.10 shows the expected useful life for the transit fleet vehicles by each vehicle group. This value is a new metric for Saint John Transit that will be applied to future procurements. The vehicle assessment age is not formalized for the transit fleet and is done on an ad-hoc basis.

3.4 Fleet Policies

Wood reviewed the various fleet policy documents provided by the City of Saint John and a high-level summary of the fleet policies and measures in place is presented below. For summarizing, Wood has classified the fleet policies into fleet management, vehicle replacement, fleet greening measures, and vehicle assignment.

3.4.1 Fleet Management

The City's Fleet Management department assumes the role of the Asset Manager for the City's Fleet and is responsible for the purchase, maintenance, utilization monitoring, and disposition of the fleet assets. Fleet Management also manages the City's vehicle pools and assigned vehicles in collaboration with the fleet user groups. Fleet Management develops the standards for developing vehicle pools (i.e., shared fleet) and vehicle assignment to each service area (i.e., user group). Fleet Management is also responsible for the overall asset monitoring including fleet utilization and lifecycle costs. Based on utilization and other requirements, Fleet Management is responsible for redistributing the fleet vehicles to different service areas on an on-going basis.

The City uses Fleet Telematics for the purpose of tracking and monitoring various fleet key performance indicators such as utilization, fuel consumption and efficiency, engine run time, high idling, and long hauling. GeoTab is the City's Fleet Telematics providers and all fleet vehicles except the police vehicles are equipped with GeoTab telematics devices. GeoTab also has other useful capabilities such as geo-fencing monitoring to ensure that fleet vehicles are performing the intended functions.

The Fleet Management group serves as the City's Fleet Asset Manager and is responsible for the acquisition of vehicle and associated equipment. Fleet Management ensures that all vehicle and equipment comply with all municipal policies and procedures. Further, Fleet Management also ensures that all vehicle and equipment purchases are sufficiently funded and charged to the correct budgets. The City has established a Fleet Reserve Fund to support the annual cost to replace existing vehicle and equipment assets. This is a mechanism developed by the City to ensure that the fleet always has sufficient funds given the importance of the City's fleet vehicles to deliver critical services, without needing to conform to an annual budget which may require council approval and delay acquisitions. Fleet Management is also responsible for providing the required training for the operation and maintenance of any new vehicles.

3.4.2 Vehicle Replacement

Fleet Management is responsible for identifying when a vehicle/equipment asset needs to be replaced. The replacement decision is made using the Optimum Replacement Point (ORP) analysis. The ORP calculation considers the asset's purchase year, annual mileage, overall condition, ratio of maintenance to the initial cost of purchase and overall mechanical condition. When an asset reaches the ORP, Fleet Management begins to evaluate the replacement decision. It does not necessarily mean that an asset needs to be replaced when it reaches the ORP. After an asset reaches ORP, Fleet Management consults with the related Service Area and revaluates the ORP based on available budget and estimated remaining useful life. Thereafter, the asset renewal decision will be revaluated periodically until the time when the asset will be replaced.

Fleet Management maintains a library of standard vehicle and equipment assets specifications. This library retains a database of general specifications to identify the basic common items requirement for each class of vehicle and equipment assets. When an asset needs to be replaced, the purchase of a renewal asset will consider the standardization of asset specifications along with specialized requirements as required. The standard specifications practice helps Fleet Management and the City in multiple areas such as better supply chain for parts, simplified personnel training, and improved maintenance efficiencies. The standardized vehicle and equipment assets specifications library need to be updated periodically as the City moves towards low-carbon and zero-emission fleet technologies in the future.

3.4.3 Fleet Greening Measures

The City of Saint John adopted the "Greening Our Fleet" policy in June 2019 which applied to City's Fleet Management and Operations. Before adopting this policy, the City recognized that unnecessary vehicle and motorized equipment idling, and long hauling wasted fuel and generated needless harmful emissions. Recognizing its responsibility to conserve natural resources, be environmentally conscious, and prevent air pollution, the City wanted to implement fuel efficient practices and improve environmental performance.

The City's "Greening Our Fleet" policy aims to reduce GHGs and other air pollutants and fuel consumption from the operation of its fleet vehicles and motorized equipment while also reducing maintenance requirements and fuel costs. This policy applies to the entire City fleet regardless of being owned, leased, or rented and the day-to-day administration of this policy is rested with the supervisory and management staff of all departments which operate the fleet vehicles. The highlights of the policy include the following:

- Fleet vehicles shall never be left idling when unattended
- Engine warm-up period to not exceed three (3) minutes provided safety critical items such as airbrake pressure have been reached
- Fleet vehicles to shut off whenever the idling time is expected to exceed three (3) minutes
- Fleet vehicles are not to be utilized for long hauling
- Employees are required to take the most direct and safe route to the destination

There are certain exclusions to the fleet policy where the policy cannot be implemented, examples include operation during extreme temperatures (below -10° C and above 27° C) and presence of emergency response vehicles in the scene of an emergency. The maximum distance for long hauling (i.e., over 40 kms) was chosen based on the service area of the City. The City indicated that the fuel consumption of the fleet vehicles had significantly dropped since the implementation of the "Greening Our Fleet" policy. The City has also committed to reduce the Public fleet's GHG emissions and air pollutants and eventually move towards zero emissions in the City's Race to Zero pledge document. There were also several fleet reduction measures introduced between 2017 and 2019. The fleet downsizing was done in two phases, beginning with a reduction of light-duty fleet in 2017 and then a heavy-duty fleet reduction in 2019. This was done with right sizing considerations such that service delivery was not impacted. These measures

along with the "Greening Our Fleet" policy have significantly reduced the overall fleet fuel consumption of the City's fleet.

3.4.4 Vehicle Assignment

The City has a "Vehicle Assignment" policy which aims to optimize cost-effective deployment of vehicles among staff and promote the shared utilization of fleet assets which would reduce the City's fleet environmental footprint. The policy directs that the job requirements shall determine the assignment of vehicles to individual members of the staff, and such determination will be made by the City Manager based on operations-centred focus of the position, after hours response needs, and average annual usage. This policy covers the assignment and utilization of "light fleet" i.e., passenger vehicles without lighting packages and/or other specialized equipment for use in operations. The policy provides guidelines for vehicle rotation to optimize the cost-effectiveness of the vehicle assignment model as required. The Service Level Agreements (SLA) established by Fleet Management with each service area outlines the service area's operational and maintenance responsibilities. The SLA helps Fleet Management on Vehicle Assignment and Fleet Right-Sizing decisions.

This policy also promotes the use of shared use of vehicles (i.e., pooling) which has been designated as the primary vehicle assignment strategy. The City operates a pool of shared vehicles that can be used by one or more operators (i.e., staff) or service areas. The pooled vehicles are managed by Fleet Management and the cost to operate the pooled vehicles are recovered through usage charges to the service areas. The introduction of vehicle pooling has allowed the City to maintain similar service levels with a smaller fleet, subsequently leading to reduced fuel consumption and increased fleet utilization levels.

3.5 Environmental Baseline

This section provides a brief introduction to the different emission scopes and the relevance to Saint John's fleet operating context. This section also presents the province of New Brunswick's emissions profile along with a comparison of the City of Saint John's 2015 and current (2021) emissions baselines.

3.5.1 Scope 1 Emissions

The U.S. Environmental Protection Agency (EPA) defines Scope 1 emissions as direct greenhouse gas (GHG) emissions that occur from sources that are controlled or owned by an organization[1]. In the context of Saint John's fleet operations, the emissions associated with the fuel combustion in vehicles is considered Scope 1 emissions (i.e., tailpipe emissions). The City of Saint John has committed to include Scope 1 emissions in this study to evaluate the past and future fleet emissions.

3.5.2 Scope 2 and Scope 3 Emissions

The U.S. EPA defines Scope 2 emissions as indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling. Scope 2 emissions physically occur at the facility where they are generated and needs to be accounted in an organization's GHG inventory because the emissions are a result of the organization's energy use. In the context of this study with conventional fleet vehicles that use fossil fuels such as diesel and gasoline, Scope 2 can be considered out of scope for the past and current GHG emissions since there is no use of electricity or steam in the vehicles.

Likewise, the U.S. EPA defines Scope 3 emissions as the result of activities from assets not owned or controlled by the reporting organization, but that the organization indirectly impacts in its value chain. In other words, an organization's Scope 3 emissions are the Scope 1 and Scope 2 emissions of another organization. Scope 3 are also referred to as value chain emissions, often representing the majority of an organization's total GHG emissions. Scope 3 emissions fall within a wide array of 15 categories including

[1] https://www.epa.gov/climateleadership/scope-1-and-scope-2-inventory-guidance

emissions from both upstream and downstream activities, though not every category will be relevant to all organizations. Figure 4 illustrates the key Scope 1, 2 and 3 GHG emissions. According to the GHG Corporate Protocol, all organizations are required to account for the Scope 1 and Scope 2 emissions when reporting and disclosing GHG emissions while Scope 3 emissions quantification is not required. While the consideration of Scope 3 emissions provides a good opportunity to reduce GHG emissions, Scope 3 emissions presents unique complications such as difficulty in identifying applicable emission categories and uncertainty in data collection. Hence, the City of Saint John has agreed to use applicable and accepted emissions factors as required throughout this study and refine them in future report updates when more information, clarity and direction is available for the use of Scope 3 emissions.

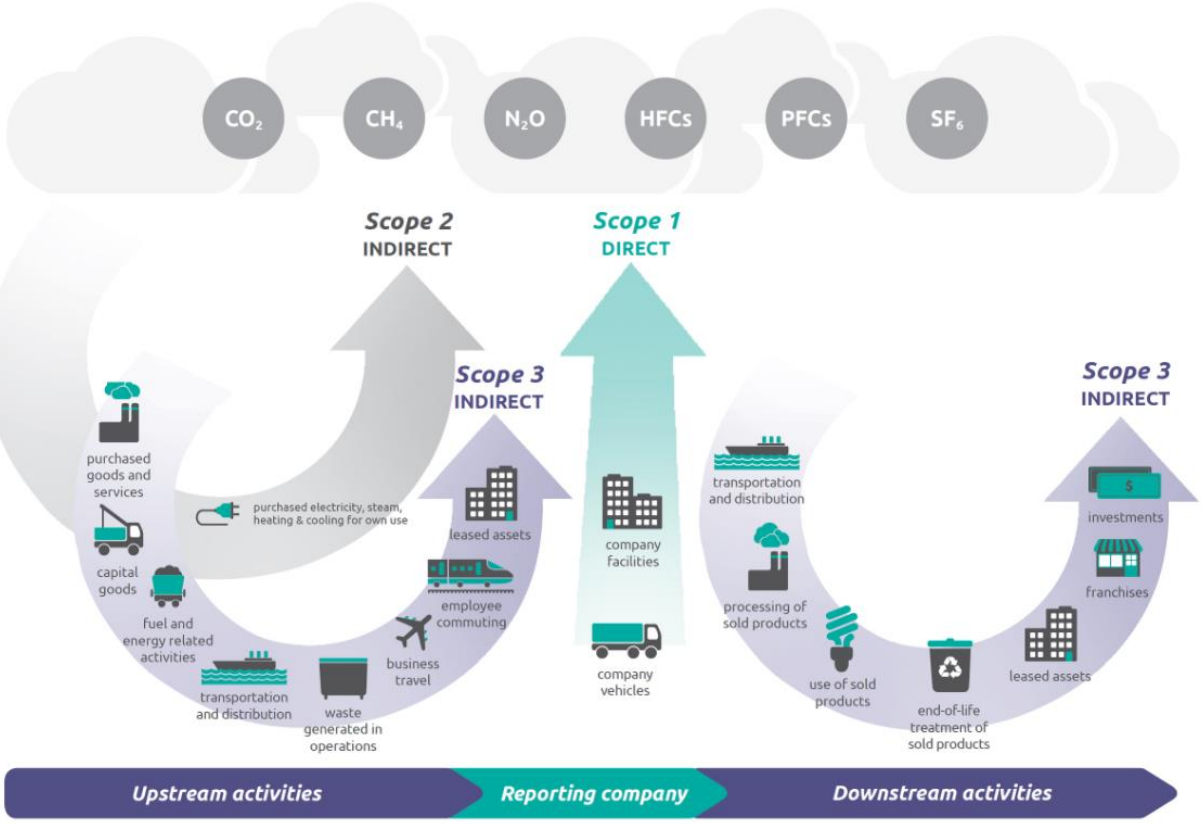


Figure 4 Scope 1, 2 and 3 GHG emission illustration (EPA)

3.5.3 New Brunswick Emissions Profile

As per the Canada Energy Regulator's Provincial and Territorial Energy Profiles[2], the Province of New Brunswick generated 12.2 terawatt hours (TWh) of electricity in 2018, which is approximately 2% of total Canadian generation. New Brunswick has a generating capacity of 4,521 megawatts (MW). Figure 5 shows New Brunswick's 2018 electricity generation split by different sources: 39% from Nuclear, 30% from fossil fuels, 21% from hydroelectricity, and the remaining 10% from wind and biomass.

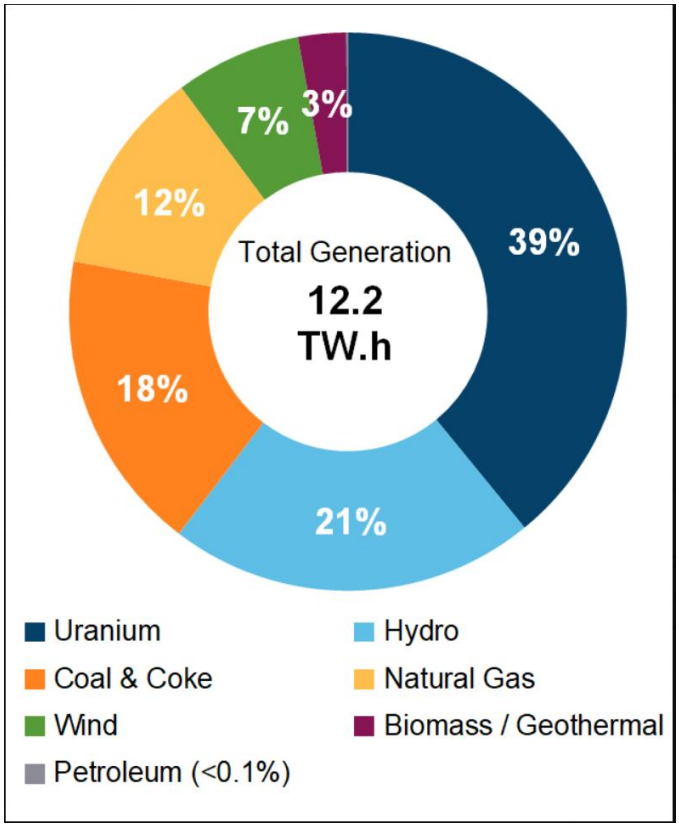


Figure 5 New Brunswick Energy Production by Type (REC)

Approximately, 70% of New Brunswick's electricity in 2018 was generated through net-zero carbon emitting sources. Based on inputs from external stakeholders, this figure is estimated to above 80% in 2020. It is important to understand the current state of New Brunswick's emissions profile, because transitioning to green fleet vehicles that uses electricity as a fuel becomes truly sustainable only when the electricity grid is clean and low carbon emitting.

As per a 2017 report by Statista[3], the 2015 electricity generation GHG emissions intensity for the Province of New Brunswick was 280 grams of CO_2e per kWh of electricity, two times the national average of 140 g/kWh of CO_2e. The Statista report showed information consolidated from the *Canada Energy Regulator* (CER). Figure 6 shows the GHG emissions intensity value by each province. The GHG emissions intensity value depends on the source of electricity the region primarily uses.

[2] https://www.cer-rec.gc.ca/en/data-analysis/energy-markets/provincial-territorial-energy-profiles/provincial-territorial-energy-profiles-new-brunswick.html
[3] https://www.statista.com/statistics/917172/emission-intensity-canada-by-province/

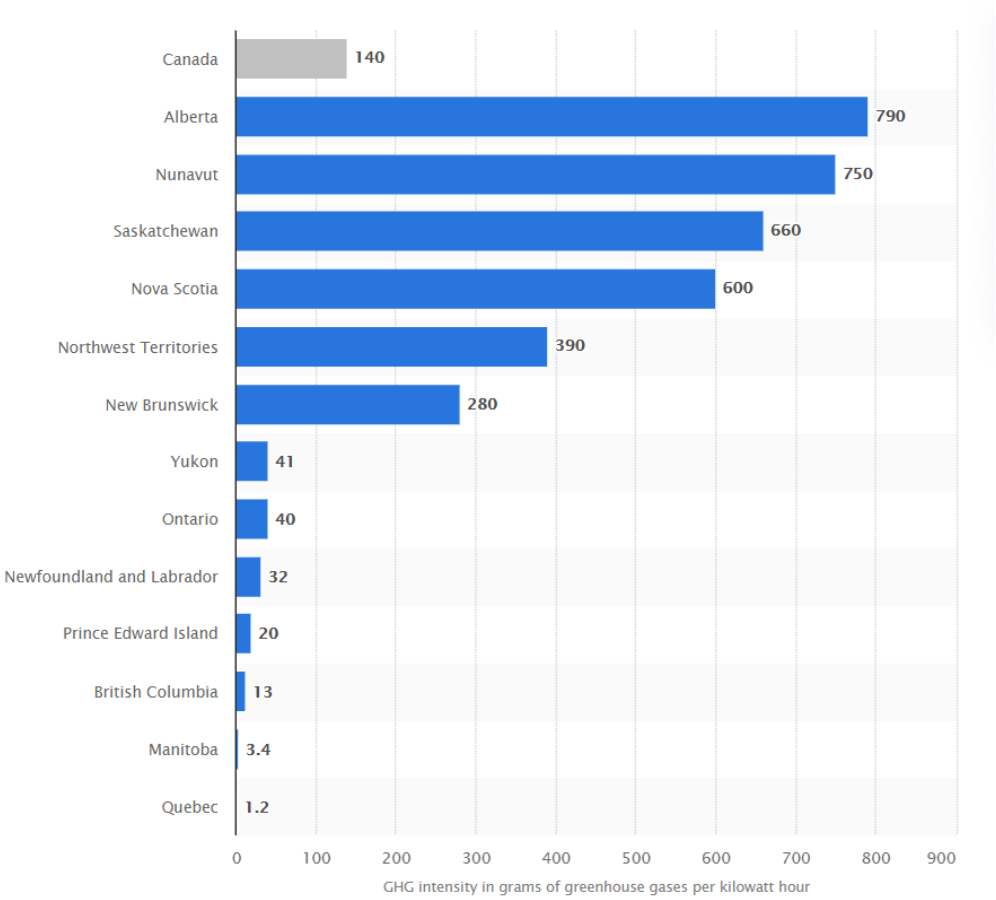


Figure 6 Provincial Carbon Intensity of Energy Production (2015)

Note that the 2015 electricity generation GHG emissions intensity for the Province of New Brunswick of 280 grams of CO_2e per kWh of electricity is specifically for generation. There are also emissions produced in the distribution of energy from producers to consumers. When the City calculates its carbon footprint it should use the electricity consumption emissions intensity, which was 290 grams of CO_2e per kWh of electricity in 2015. This distinction is inconsequential for the transportation emissions in the 2015 baseline, as no transportation assets consumed electricity as a fuel. When comparing the viability of adopting electric vehicles, the consumption emission intensity will be used.

3.5.4 2015 Baseline

As per the *2019 City of Saint John Corporate GHG & Energy Action Plan*, the fleet vehicles alone contributed to 7,390 tonnes of CO_2e in 2015, contributing to almost a third (31.1%) of total corporate GHG emissions. As per the report, in 2015 fleet vehicles consumed 2,037,035 litres of diesel and 788,719 litres of gasoline. This resulted in an estimated 5,466 tonnes of CO_2e emissions for diesel fuel and 1,924 tonnes of CO_2e emissions for gasoline fuel. This estimation was used to calculate the following GHG emission factors that were used in this study for equivalent comparison:

- Gasoline fleet GHG emissions factor: 2.440 kg/litre
- Diesel fleet GHG emissions factor: 2.683 kg/litre

The total fleet GHG emission of 7,390 tonnes of tonnes of CO_2e will be considered as the 2015 GHG emission baseline in this study.

3.5.5 Current Emissions (2021)

Wood performed a fuel consumption analysis on the City's public fleet vehicles using the fleet telematics data from GeoTab. This showed that in 2021 the public fleet vehicles consumed 514,108 litres of diesel fuel and 192,741 litres of gasoline fuel. A separate analysis showed that Transit fleet vehicles consumed 824,400 litres of diesel fuel in 2021. This resulted in a total fleet GHG emissions of 4,062 of tonnes of CO_2e, a 45% reduction from the 2015 GHG emission baseline. The comparison between the 2015 GHG emissions baseline and current (2021) GHG emission is shown in Figure 7.

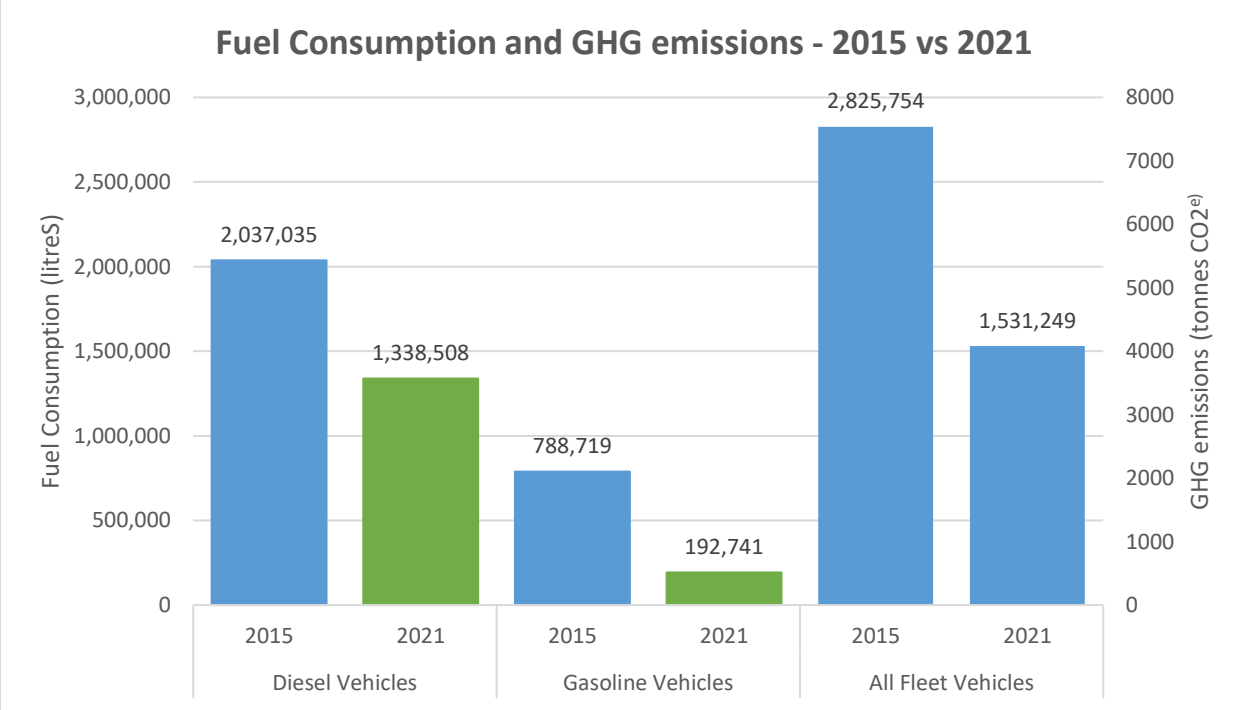


Figure 7 2015 vs 2021 Fleet Fuel Consumption and GHG emissions comparison

4.0 Market Scan

A market scan was performed to explore lower emission alternatives for each vehicle class. This included understanding key performance indicators such as range, cost, horsepower, and fuel economy. This information was compared with the operational requirements of the user groups at the City that participated in focus group sessions to understand which alternatives could be feasibly incorporated into the City fleet.

This section is structured to begin with a brief overview of fleet technologies, followed by an exploration of public vehicle (based on vehicle class) and transit vehicle alternatives.

When identifying alternatives for each vehicle class, the goal of the Carbon Migration Strategy is to prioritize zero-emission solutions (battery-electric and hydrogen) before transitional technology solutions (CNG, hybrid-electric, plug-in). This Carbon Mitigation Strategy informed the selection of vehicles for the Market Scan.

4.1 Technology Overview

When discussing fleet technologies in the context of reducing emissions, it can be helpful to categorize vehicles by the carbon intensity of their emissions.

4.1.1 Conventional Internal Combustion Engine (ICE) Technologies

Conventional internal combustion engine technologies include gasoline and diesel vehicles, which are currently the most common technology used in public fleets and in private ownership. These vehicles rely on fossil fuels which are very carbon intensive. Other propulsion technologies using similarly carbon intensive fuels, such as propane, are sometimes included in this category.

Benefits to these technologies include a mature supply chain with ubiquitous availability of fuelling infrastructure leading to a proven track record of successfully delivering fleet duty-cycles and services. Further, the wide adoption of these technologies has led to a matured industry for supporting and maintaining these vehicles.

Vehicles using these technologies are generally the starting point for most fleets aiming to reduce their carbon footprint. Due to the widespread adoption and dominance in the current fleet mix, conventional ICE technologies generally serve as a baseline for comparing alternative technologies.

4.1.2 Transitional Propulsion Technologies

Transitional propulsion technologies include plug-in hybrid, electric hybrid, compressed natural gas (CNG), renewable natural gas (RNG), and biodiesel, which are aimed to bridge the gap between the high emission ICE technologies and zero-emission technologies which do not currently meet requirements of all fleet needs.

The major benefit of transitional propulsion technologies is the reduced carbon emissions in the short term and reduced need for operational and facility modifications and staff training; however, these technologies are not zero-emission meaning that they will likely need to be phased out again to meet corporate net-zero emission targets. With the rapid evolution in battery and hydrogen fuel cell technologies and the corresponding decline in their prices, the risk to municipalities in procuring the transitional propulsion technologies is being “locked-into” these relatively more carbon-intensive technologies for the period of the vehicle lifecycle while missing out on cleaner zero-emission vehicle alternatives. This leads to a delayed adaptation of the facilities, operations and staff into these zero-emission technologies. Because of this, it could be advantageous to avoid these solutions in order implement zero-emission vehicles, even at the cost of operating conventional ICE technologies for a short period of time.

However, in the event where the zero-emission technologies are not expected to meet operational requirements in the short to medium term and continued operation of ICE vehicles will lead to significant emissions, transitional propulsion technologies should seriously be considered to enable the city to achieve its carbon reduction goals. In this situation, transitional propulsion technologies can bridge this gap by meeting the dual requirements of reduced emissions while meeting service duty requirements.

4.1.3 Zero-Emission Technologies

Zero-emission technologies include battery electric and hydrogen fuel cell technologies. These technologies can be defined as the final state for the Carbon Migration Strategy as the goal is ultimately to reach a state of carbon neutrality.

4.1.3.1 Battery Electric

The most notable benefits of battery electric technologies are lower GHG and pollutant emissions. Rather than consuming fuels to propel the vehicle, energy is drawn from an on-board battery resulting in zero tailpipe emissions. Additional benefits include reduced maintenance requirements due to less wear and tear due to lesser number of rotating/moving parts. Despite the zero-emission label, the act of recharging the batteries does generate emissions as the electricity grid is not made up of entirely renewable sources. Overall, zero-emission technologies do significantly reduce emissions, which is expected to continuously improve as electricity grids decarbonize.

Another benefit of battery electric technologies is the reduction in noise pollution that current diesel and gasoline vehicles produce across many different situations from Pass-by, Cruise-by, Take-off, idling, and at constant speed.

The main limitation to battery electric vehicles is that they require long periods of time to recharge and have limited range compared to ICE/GHG technologies. This makes the technology well suited for consistent duty cycles (both range and time) with the expectation that vehicles will return to the same location each night for recharging, which is the case for public fleets and transit. Other charging strategies include opportunity charging (fast charging using high-power chargers) and continuous operations as well as wireless inductive charging; however, these approaches are less mature than overnight recharging strategies at time of writing.

An alternative to waiting until the evening to charge the vehicles in the depot is to Opportunity Charge the vehicles when they return to the depot throughout the day. With the use of a Charger Control System, a vehicle can be assigned to a charger with enough time to charge the vehicle to a sufficient charge level plus a reserve that will enable it to complete its next duty cycle. This method of charging reduces the time and energy required to fully charge the vehicle in the evening.

Scalability can be a concern for electrification as significant power demands may be difficult for utilities to support, particularly for large fleets. Transit agencies are often constrained in terms of available upstream power from utilities and associated electric infrastructure which could limit the charger power levels or the number of chargers at the facilities. Also, the high-power levels due to simultaneous charging of electric vehicles through fast chargers contribute to high demand charges being levied on municipalities by the utilities. To address this, battery-based energy storage devices can be employed at transit facilities which could trickle charge (low-power charging) during the non-peak hours at cheaper rates and can be used for peak-time charging of the electric vehicles. This results in peak-shaving and load shifting, thereby leading to reduced costs.

4.1.3.2 Hydrogen Fuel Cell

Hydrogen fuel cell technologies are also zero-emission, with no emissions being emitted directly from the vehicle. The emissions associated with creation of hydrogen vary depending on the method of

production, which are categorized by colours to represent the respective emissions profile. The spectrum of colours has expanded and been refined over time, with the current key colours being black, brown, blue, green, and turquoise.

- **Black & Brown Hydrogen:** carbon intensive hydrogen produced through the gasification of coal or lignite, or through steam reformation which consumes natural gas.
- **Blue Hydrogen:** moderately carbon intensive hydrogen from steam methane reformation. In this method, emissions are mitigated (by approximately half) using carbon capture and storage.
- **Green Hydrogen:** zero-emission hydrogen produced by electrolyzing water using power from renewable sources (solar, wind, tidal). This can be particularly advantageous as renewable power can be abundant outside of peak times and would otherwise be wasted.
- **Turquoise Hydrogen:** zero-emission hydrogen produced by separating methane into hydrogen and solid carbon. The carbon can then be repurposed for industrial processes or buried.

The benefits of hydrogen fuel cell technology are the emissions reduction achieved when using green or turquoise hydrogen. Beyond the emission reduction, the gaseous nature of hydrogen and its higher energy density than conventional fuels enable larger amount of hydrogen being packed on to the vehicles leading to significantly longer range. An additional advantage associated with hydrogen refuelling is the ability to use of existing CNG refuelling infrastructure with some modifications for hydrogen dispensing leading to much faster refuelling times than battery electric. The ability to use the existing CNG infrastructure with minor modifications results in reduced fuelling infrastructure costs for hydrogen.

In summary, while both the technologies can lead to zero-emissions based on the fuel source or grid profile, battery-electric technology has been adopted more extensively in North America. Hydrogen fuel availability is a big concern for municipalities and the uptake scale and production methods impact the fuel costs. With the capital costs for both these zero-emission technologies being expensive than conventional vehicles, municipalities generally prefer the relatively cheaper battery electric vehicles above the hydrogen fuel cell vehicles, although scaling up battery electric technology could lead to high power demand thus requiring large scale facility refurbishment and grid-side infrastructure upgrades while scaling up hydrogen fuel cell vehicles is easier on account of hydrogen refuelling process being operationally similar to CNG refuelling. Scaling up hydrogen production is also expected to result in a decline in production costs. While hydrogen fuel cell vehicles can reduce the need for cabin heating in winters due to heat being a by-product of the process, battery electric technologies have superior power and torque.

The operational end-use, the expansion plans, state of infrastructure, and fleet-readiness levels are other critical deciding parameters that could impact the selection of the zero-emission technology variants. Another aspect is the lifespan of the vehicles and in the case of battery electric vehicles, the lifespan of the batteries themselves. The batteries' lifespan is generally accepted to be around 7 years and the City will be required to carry out battery refurbishment beyond that time-period leading to additional costs. It is critical to compare the vehicle lifespan against the general timeline for transitioning while projecting procurement requirements for these technologies into the future to prevent sub-optimal use or premature retiring of the vehicles.

4.1.4 Battery Electric Charging Equipment and Levels of Charge

There are three (3) different types of chargers available on the market. The first and most prevalent are plug-in chargers. Plug-in chargers are typically less expensive than other charging equipment and the mechanism for charging most resembles how GHG vehicles are fuelled. Drawbacks include a lower comparative rate of charge and that they require more depot space per dispenser.

The second type of charger are overhead chargers. These chargers generally provide the highest rate of charge and are often referred to as 'fast' chargers. It is important to note that fast chargers are not limited to overhead chargers, instead, 'fast' or 'slow' is a function of the charger power rating. Overhead chargers are also commonly referred to as "pantograph chargers" as they mechanically function by making contact between charging rails and a pantograph apparatus. The high rate of charge and automated connection capability makes overhead fast chargers ideal for opportunistic charging strategies.

The third type of charging equipment is inductive charging. Inductive is the newest commercially available charging technology which leverages electromagnetic induction to wirelessly charge vehicles. These chargers offer the same opportunistic charging capabilities without any moving parts. The main drawback to this method of charging is its lower charging efficiency of 80% compared with 95% of the first two methods. This lower charging efficiency means that a larger proportion of energy is used in the act of charging rather than being transferred into the vehicle's battery. Additional concerns include complex construction requirements and significant considerations with respect to maintenance.



Plug-in charger



Overhead (pantograph) charger



Inductive Charger

Similar to different types of chargers, there are different levels of charging. The Society of Automotive Engineers surface vehicle standard J1772 classifies these as AC and DC charging (Alternating Current and Direct Current). With AC charging, energy is delivered to the vehicle's On-Board Charging (OBC) system which converts it into DC to charge the battery. This is necessary because electric vehicles use DC batteries, meaning they can only be charged using DC power. Using a DC charging system, energy is supplied directly to the vehicle's battery bypassing the OBC. This allows for faster charging rates and is commonly called DC fast charging (DCFC).

The AC and DC charging configurations are further classified into Level 1 and 2 depending on the maximum rate of charge. For both AC and DC, Level 1 refers to a slower rate of charge while Level 2 is faster. It is common in the electric vehicle industry for AC level 1 (up to1.92 kW) and level 2 (up to 19.2 kW) to simply be referred to "Level 1" and "Level 2" respectively. When referring to DC charging, both levels are referred to as "Level 3" (up to 400 kW) for simplicity.

4.1.5 Environmental Protection Agency (EPA) fuel efficiency for zero-emission vehicles

Cars manufactured and marketed in North America need to meet a range of regulatory standards such that they can be sold in US and Canadian markets. One governing agency in the US is the Environmental Protection Agency (EPA) which certifies and reports fuel economy of commercial vehicles. The calculated unit for efficiency is Miles per Gallon (MPG), which is the distance, measured in miles, that a vehicle can travel per gallon of fuel. This metric is often reported in Canada as litres per 100 km (L/100km). The higher a vehicles' MPG, the more fuel efficient it is. Using the L/100km metric, a lower value is more efficient.

To compare ICE vehicles to electric vehicles, the EPA developed a Miles per Gallon Equivalent (MPGe), which considers 33.7 kilowatt-hours (kWh) of electricity is comparable to a gallon of fuel in terms of its energy content. This value was calculated based on the carbon intensity of the US electricity grid in the

early 2000s. Using the average carbon intensity of Canadian electricity grid, the effective MPGe would be doubled as the Canadian grid emits half as much carbon per kWh generated. Unfortunately for Saint John, the New Brunswick electricity grid is very comparable to the EPA MPGe baseline (2% less efficient) meaning that no additional carbon emission reduction can be calculated until the local grid becomes more efficient than the EPA baseline.

4.2 Public Fleet Vehicle Alternatives

This section outlines the key manufactures of public fleet vehicles, followed by alternative vehicles technologies for each class. Each class includes a summary table of two (2) or three (3) alternative technologies. A baseline vehicle, selected from the existing fleet, was included in the summary table for comparative purposes.

Note that all zero/no-emission vehicle technologies were considered for each vehicle, however the number of vehicles highlighted were limited to three (3) to focus on the alternatives that provide the best fit with the goals of the Carbon Migration Strategy, i.e., identifying long-term replacements (mainly zero-emission alternatives like battery-electric, hydrogen fuel cells) and short-term transition alternatives (mainly CNG, hybrid-electric, etc.)

It was observed that comparatively more transitional and zero-emission options are available for lighter-duty vehicles (lower weight class vehicles) as compared to higher-class, heavier-duty vehicles (excavators, backhoe, trucks, etc.). However, with growing impetus on municipal and industrial decarbonization, more heavy-duty vehicle and specialized vehicle manufacturers are in the process of developing and launching transition and zero-emission alternatives.

4.2.1 Key Manufacturers

4.2.1.1 Ford Motor Company

Ford Motor Company (commonly known as Ford) is an American multinational automobile manufacturer headquartered in Dearborn, Michigan, United States. The company sells automobiles and commercial vehicles under the Ford brand, and luxury cars under its Lincoln luxury brand. Ford is the second-largest U.S.-based automaker (behind General Motors) and the fifth largest in the world



The 2022 Ford F-150 Lightning full-size battery electric pickup truck is a notable alternative for light/medium duty fleets scheduled for first delivery mid-2022. The approximate battery capacity of 125 kWh has an estimated range of 370 km. The maximum payload is listed as 2,000 pounds with a maximum towing capacity of 10,000 pounds.

4.2.1.2 General Motors Company (GM)

General Motors Company (GM) is an American multinational automotive manufacturing company headquartered in Detroit, Michigan, United States. It was founded in 1908, as a holding company, and was restructured into as its current establishment in 2009. The company is the largest American automobile manufacturer and one of the world's largest automobile manufacturers. In North America, GM products focus primarily on its four core divisions: Chevrolet, Cadillac, Buick, and GMC.

4.2.1.3 Chevrolet

Chevrolet is Division of General Motors Company. In North America, Chevrolet produces and sells a wide range of vehicles, from subcompact automobiles to medium-duty commercial trucks. Due to the prominence and name recognition of Chevrolet as one of General Motors' global marques, 'Chevrolet', 'Chevy' or 'Chev' is used at times as a synonym for General Motors



Chevrolet's current battery electric vehicle offering is limited to the Bolt EV, a subcompact hatchback launched in 2016. The 2022 model has a battery capacity of 65 kWh with a resulting range of 417 km. The model has a maximum horsepower of 200.

The all-electric Chevrolet Silverado has also been announced for debut in 2022, however few details are available at time of writing.

4.2.1.4 GMC

GMC (formerly the General Motors Truck Company, or the GMC Truck & Coach Division (of General Motors Corporation), is a division of the American automobile manufacturer General Motors (GM) that primarily focuses on trucks and utility vehicles. GMC currently makes SUVs, pickup trucks, vans, and light-duty trucks, catered to a premium-based market. In the past, GMC also produced fire trucks, ambulances, heavy-duty trucks, military vehicles, motorhomes, transit buses, and medium duty trucks.



GMC's zero-emission entries are currently limited to the Hummer EV Pickup and the Hummer EV SUV. These vehicles are expected to have a 560 km range, up to 1,000 horsepower, and 11,500 pound feet of torque.

4.2.1.5 Toyota Motor Corporation

Toyota Motor Corporation, commonly referred to as Toyota, is a Japanese multinational automotive manufacturer headquartered in Toyota City, Aichi, Japan. It was founded in 1937. Toyota is one of the largest automobile manufacturers in the world, producing vehicles under five brands: Toyota, Daihatsu, Hino, Lexus, and Ranz.



Toyota is a historic leader in the development and sales of more fuel-efficient hybrid electric vehicles, starting with the introduction of the Toyota Prius in 1997. The 2022 Prius Prime is Toyota's most recent plug-in hybrid offering. The vehicle has 40 km of EV range using its 8.8 kWh battery. Once battery state of charge for EV propulsion is depleted, the 1.8L ICE engine is engaged to propel the vehicle.

4.2.1.6 Tesla Inc.

Tesla, Inc. is an American electric vehicle and clean energy company based in Palo Alto, California, United States. Tesla designs and manufactures electric cars, battery energy storage from home to grid-scale, solar panels and solar roof tiles, and related products and services. The company is the most dominant EV provider in the US, accounting for over 65% of all EV sales in 2021[4].

[4] http://www.experian.com/blogs/insights/2021/10/ev-registrations-grow-first-half-2021-non-electric-remains-dominant/?sid=bi%7C61719189d861f955f72277ae%7C16378719206072f8l1lz6

Tesla vehicles, including the Model S, Model 3 and Model Y, have seen recent pilot deployments as police cruisers in California, West Virginia, Ohio, Colorado, and Massachusetts.

4.2.1.7 Rosenbauer

Rosenbauer is ranked among the top three largest fire and rescue apparatus vehicles manufacturers globally. Their products range from Aerials, Pumpers, Rescues, Tankers, Industrial and Aircraft Rescue vehicles.



Rosenbauer has launched a product line for hybrid electric fire trucks in 2014 which are currently in service at Berlin, Amsterdam and Dubai. BMW diesel engines are used to charge the batteries. While the hybrid trucks are sold at a premium over the conventional fire trucks, the cost differential is matched by savings on fuel and maintenance.

4.2.1.8 Lion Electric

Lion Electric Company is a Canadian based manufacturer of commercial heavy-duty battery based electric vehicles including public transit buses, school buses, semi-trucks, bucket trucks, and garbage refuse trucks. It designs, manufactures, and assembles all components in its vehicles including chassis, battery packs, cabin, and powertrain.



In 2018, Lion Electric ventured into the electric truck market by launching its class 8 fully electric truck Lion8 in a cabover configuration with a 480 kWh battery pack designed for urban and vocational use. In addition, it has also launched a class 6 electric truck Lion6 and Lion 8 Refuse truck with 336 kWh battery pack.

4.2.1.9 Global Environmental Products

Global Environmental Products stands out as one of the leading manufacturers of specialized street cleaning equipment focusing on heavy-duty and customized street sweepers. Global has focused on ease of accessibility and claims the lowest total cost of ownership for its range of prod uct as compared to others in the market which can be shared with potential clients upon request. Global is ISO 9001:2015 certified and has integrated features on to their products such as the chassis-mounted AIR sweeper, high-capacity Gutterbrooms with ability to pick up to 3-tons of sand per hour.



Their product range is inclusive of a CNG variant (M4 HSD CNG), a battery electric variant (M4 Electric), and a hydrogen fuel cell variant (M4 HSD Fuel Cell) of their Global 'M' heavy duty sweeper series.

4.2.1.10 CASE Construction Equipment

CASE Construction Equipment company is an American manufacturer of construction equipment with an experience of around 175 years. Its range of products include excavators, motor graders, wheel loaders, vibratory compaction rollers, crawler dozers, skid steers, and compact track loaders.



In 2019, CASE Construction Equipment launched its Project TETRA which comprised of a methane-powered wheel loader which was the brand's first foray into alternative fuel vehicles. It comprises of an engine that is powered by CNG ensuring 15% less CO_2 and 99% less particulate matter.

This significant launch was followed by the launch of its Project ZEUS which comprised of a CASE 580 EV- the industry's first fully electric backhoe loader with a 480 V, 90 kWh lithium-ion battery pack.

4.2.1.11 Volvo

Volvo Construction Equipment is a Volvo group subsidiary and a major international player that develops, manufactures, and markets equipment for construction industries. It has a global presence, and its range of products include wheel loaders, hydraulic excavators, articulated haulers, motor graders, soil and asphalt compactors, pavers, backhoe, loaders, skid steers, and milling machines. Volvo Construction Equipment has launched its range of electrical equipment and machinery that comprise of Volvo L25 Electric compact wheel loader and Volvo ECR 25 Electric compact excavator.



The L25 Electric compact wheel loader has an electric drivetrain peak power of 48 hp and utilizes a battery pack of 48 V, 39 kWh which can provide a runtime of 8 hours.

The Volvo ECR 25 Electric compact excavator has the peak power capacity of 24 hp supported by a 48 V, 20 kWh battery pack that can provide a runtime of 4 hours.

4.2.2 Vehicle Class Description

The United Stated Federal Highway Administration has developed the following classification system for vehicles. For the purpose of this project, Wood will leverage this existing classification for finding classifying the existing vehicle fleet and suggesting suitable zero-/low- emission alternatives to the City. The following Table highlights the Vehicle classes and their distinguishing aspect of Gross Vehicle Weight Ratings:

Table 4.1 Federal Highway administration: Vehicle Class Description by GVWR

Vehicle Class	Gross Vehicle Weight Ratings (GVWR)
Class 1	<6000 lbs
Class 2	6001-10,000 lbs
Class 3	10,001- 14,000 lbs
Class 4	14,001-16,000 lbs
Class 5	16,001-19,500 lbs

Class 6	19,501-26,000 lbs
Class 7	26,001-33,000 lbs
Class 8	>33,001 lbs

Using a combination of vehicle class as defined by weight ratings and the functional use of the vehicles, Wood worked collaboratively with the City to define eight (8) vehicle groups that would encompass the range of on-road public fleet assets. Note that the vehicle class number was included as a guide to the size of vehicles included in the group, however some assets may belong to a vehicle group without conforming exactly to the class number listed.

Table 4.2 City of Saint John: Public fleet Vehicle Groups

Vehicle Group #	Municipal Vehicle Group Name
1	Class 1 – General Purpose
2	Class 1 – Police Cruiser
3	Class 2 – Light Duty Pickup Truck
4	Class 3, 4, & 5 – Heavy Duty Pickup Truck
5	Class 6, 7, & 8 – Heavy Duty Truck Platform
6	Class 7 – Streetsweeper
7	Class 8 – Pumper Fire truck
8	Class 8 – Refuse Truck

The eight (8) vehicle groups included most the City's transportation assets. The fleet elements outside of this report's scope included diesel generators, historic/museum vehicles, hyper specialized vehicles that were not planned to be renewed, ice makers, and construction equipment. The construction equipment, made up of loaders and excavators, was identified as a future vehicle group for the City to consider moving to green alternatives. To serve as a starting point for future studies, the market scan was expanded to include an additional vehicle group: Class 4 – Loader & Backhoe Equipment.

4.2.3 Class 1 Propulsion Technologies (General Purpose)

Many low- and zero-emissions alternatives exist for Class 1 vehicles. In particular, battery electric vehicles (BEV) have seen many announcements in 2021 from a wide range of OEMs. Car and Driver Magazine lists 55 Class 1 battery electric vehicles that are expected to launch between 2021 and 2025, the majority of which are launching in 2022[5].

There are few consumer vehicles in this Class that are propelled using hydrogen fuel cell technology, though several OEMs are actively developing products. This includes OEMs such as Honda, Toyota, Audi, Mercedes, and BMW. The notable exception to this is the Toyota Mirai which initially debuted in 2014. The current 2022 model has limited availability (only available in California and Hawaii) due to lacking hydrogen fuelling infrastructure. This barrier may be easier for a fleet to overcome, especially if it is incorporated into a wider hydrogen fuelling strategy for multiple vehicle types.

[5] https://www.caranddriver.com/news/g29994375/future-electric-cars-trucks/

When comparing the performance metrics of low-emission Class 1 vehicles, presented in Table 4.3, the hydrogen-fuelled Mirai maintains the longest range. However, it also comes at the highest price and lowest fuel efficiency. The plug-in hybrid Prius Prime had the highest fuel efficiency at the lowest cost, however the EV Mode Range is limited to 40 km, after which the ICE propulsion system will be engaged. The result for the Prius Prime is that emissions will significantly increase for duty-cycles beyond 40km. The battery electric alternative, the Bolt EV,

Table 4.3 Class 1 (General Purpose) Alternative Technologies

Vehicle Characteristics	Sample Current Fleet (Gasoline)	Battery Electric	Hydrogen Fuel-Cell	Plug-in Hybrid
Image				
Make	Toyota	Chevrolet	Toyota	Toyota
Model	Corolla	Bolt EV	Mirai XLE	Prius Prime
Model Year	2020	2022	2022	2022
Starting MSRP	$23,000	$38,198	$62,750	$28,220
Fuel Efficiency (EPA-estimation)	33 MPG	120 MPGe	74 MPGe	133 MPGe
EV Mode Range	-	417 km	647 km	40 km
Charging Time	-	3 hours (level 2)	-	-
Engine/Battery Size	1.8L	65 kWh	5.6 kg	1.8 Litre/8.8 kWh
Power	203 kW	150 kW	134 kW	219 kW

4.2.3.1 Class 1 alternatives by technology

The following tables list the market products available for each technology at time of writing.

Table 4.4 Class 1 – Battery Electric Vehicles

BMW i3	Nissan LEAF
Chevrolet BOLT	Smart fortwo Electric
Ford Mustang Mach-E	Tesla Model 3
Hyundai IONIQ Electric	Tesla Model S
Hyundai KONA Electric	Tesla Model X
Jaguar I-PACE	Tesla Model Y
Kia Niro	Tesla Cybertruck (pre-order)

Kia Soul Electric	Volkswagen e-Golf
MINI Cooper SE	

Table 4.5 Class 1 – Hydrogen Fuel-Cell Vehicles

Toyota Mirai	Honda Clarity
Hyundai Nexo	

Table 4.6 Class 1 – Plug-in Hybrid Vehicles

BMW i3 REx	Kia Niro PHEV
BMW i8	Kia Optima PHEV
BMW X3 30e	Range Rover PHEV HSE,
BMW X5 45e	Mercedes-Benz GLC 350e
BMW 330e	MINI Cooper S E Countryman ALL4 PHEV
BMW 530e xDrive	Mitsubishi Outlander PHEV
BMW 740e xDrive	Porsche Cayenne S E Hybrid
Chrysler Pacifica Hybrid	Toyota Prius Prime
Ford Fusion Energi	Volvo XC60 T8 eAWD
Honda Clarity PHEV	Volvo XC90 T8 eAWD
Hyundai IONIQ Plug-In Hybrid	

Table 4.7 Class 1 – Hybrid Vehicles

Acura RLX	Lexus GS 450h
Audi Q5 Hybrid	Lexus LS 600h L
Audi R8 E-Tron 2017	Lexus NX 300h
Ford Fusion Hybrid	Lincoln Aviator Grand Touring
Honda Accord Hybrid	Lincoln MKZ Hybrid
Hyundai Ioniq	Mercedes-Benz GLC 350e 4MATIC
Hyundai Sonata Hybrid	Toyota Camry Hybrid
Infiniti QX60 Hybrid	Toyota Highlander Hybrid
Kia Optima Hybrid	Toyota Prius
Lexus CT 200h	Toyota Prius c
Lexus ES 300h	Toyota Prius v
Lexus RX 450h	Toyota Rav4 Hybrid

4.2.4 Class 1 Propulsion Technologies (Police Cruiser)

Police cruisers are class 1 vehicles, though they have a specialized function with duty-cycle requirements separate than general purpose sedans. This includes meeting the operator's expectation for horsepower, torque, top speed, and handling. Furthermore, modifications are required to meet all of the functions of a

police cruiser, including lights, secured rear seating, engine optimizations, and much more.

Battery electric solutions are the only zero-emission technology to have been deployed in North America, which have had several pilot deployments in five (5) US states. To date the vehicles used have been limited to Tesla models, with the preliminary finding that the vehicles are able to meet the duty-cycle demands of the police fleets with few changes to operating practices. One operation adjustment is that officers aim to maintain at least 50% charge by ensuring the vehicle is always being recharged when officers return to the office. Early feedback suggests that departments prefer the Model Y over the Model 3, as it provides more space and better access to the rear seats. These models may be prohibitively expensive with base consumer models costing $76,690.

A potential battery electric alternative is the recently launched Ford Mustang Mach-E with similar performance specifications at a much lower price of $52,590. The Mach-E does not have current deployments however it is the first electric vehicle to pass the Michigan State Police 2022 Model Evaluation. The Michigan State Police is one of two law enforcement agencies that annually test new model year police vehicles and publish the results for use by agencies nationwide.

As identified for the Class 1 General Purpose vehicles, the only hydrogen fuel cell vehicle available in North America is the Toyota Mirai. Testing would be required to determine whether this vehicle could be adapted to meet the needs of a police department, but the additional range provided by hydrogen technologies may allow for better replacement ratio in the medium to long term (once the technology improves).

The Ford Interceptor Utility is an electric hybrid vehicle which has already been adopted by the City of Saint John. This technology may serve as an effective solution for reducing emissions as zero-emission alternatives are piloted and improved.

Note that the Ford Interceptor Utility is the only purpose-built police cruiser listed. Each other example vehicle will have an increased procurement price to accommodate the necessary modifications required for police cruisers. Further, these modifications will likely change other performance information, such as torque, power, top speed, range, etc. The price of these options will likely increase (approximately $10,000) when procuring a police model.

Table 4.8 Class 1 (Police Cruiser) Alternative Technologies

Vehicle Characteristics	Sample Current Fleet (Gasoline)	Battery Electric	Hydrogen Fuel-Cell	Electric Hybrid
Image				
Make	Toyota	Ford	Toyota	Ford
Model	Corolla	Mustang Mach-E	Mirai XLE	Interceptor Utility
Model Year	2020	2022	2022	2022
Starting MSRP	$23,000*	$52,590*	$62,750*	$53,680
Fuel Efficiency (EPA-estimation)	33 MPG	90 MPGe	74 MPGe	24 MPG
EV Mode	-	418 km	647 km	-

Range				
Charging Time	-	1 hour (Level 3)	-	-
Engine/Battery Size	1.8L	70 kWh	5.6 kg	3.3L
Power	203 kW	195 kW	134 kW	234 kW

4.2.5 Class 2 Propulsion Technologies (Light Duty Pickup Truck)

In general, a significant portion of all public fleets is comprised of light duty pickup trucks. Due to their number and use, they are a significant contributor to fleet emissions.

Currently, many municipalities have adopted transitional technology such as CNG and hybrid electric on the path to low/zero-emission technology like battery electric or hydrogen-fuel cell electric. While CNG has been utilized for smaller class of trucks since early 2010s, the relatively recent blending of Renewable Natural Gas (RNG) into the CNG has opened another potential pathway to further reduce the carbon intensity of the fuel.

For zero-emission technologies, no hydrogen fuel cell technology is commercially available, however battery electric options have begun to debut from various OEMs. The first battery electric light duty pickup truck targeted for public fleets set to launch is the Ford F150 Lighting. The F150 Lightning is available for pre-order now with expected delivery beginning in early 2022.Hybrid options are also available for light duty pickup trucks. The Ford Maverick was highlighted due to its relatively low price and high performance.

Table 4.9 Class 2 (Light Duty Pickup Truck) Alternative Technologies

Vehicle Characteristics	Current Fleet (Diesel)	Battery Electric	Electric Hybrid
Image			
Make	Dodge	Ford	Ford
Model	RAM 1500	F150 Lightning	Maverick XL
Model Year	2019	2022	2022
Starting MSRP	$35,500	$52,500	$25,900
Fuel Efficiency (EPA-estimation)	22 MPG	85 MPGe	37 MPG
EV Mode Range	-	370 km	-
Charging Time	-	10 hours (Level 2) 45 minutes (Level 3)	-
Engine/Battery Size	3.0L	125 kWh	2.5L

Power	194 kW	313 kW	183 kW

4.2.5.1 Light Duty Pickup Truck by technology

Table 4.10 Class 2 – Light Duty Pickup truck – Battery Electric

Tesla Cybertruck	Atlis XT
Rivian R1T	Hercules Alpha
Bollinger B2	Fisker Alaska
Lordstown Endurance	Nissan Titan Electric Truck
GMC Hummer EV	Canoo Electric Pickup Truck
Ford F150 Lightning	Alpha Wolf
Chevrolet Silverado EV	

Table 4.11 Class 2 – Light Duty Pickup truck – Hybrid Electric

GMC Sierra 1500 Hybrid Pickup Truck	Ford F-150 Hybrid
Toyota Hybrid A-BAT	Ford Maverick
Chevrolet Silverado 1500 Hybrid Truck	RAM 1500 Hybrid
Hyundai Santa Cruz	

4.2.6 Class 3, 4 & 5 Propulsion Technologies (Medium-to-Heavy Truck Platforms)

Trucks of Class 3-5 range are generally employed for medium- to – heavy-duty usage by municipalities. Public fleets employ vehicles of these classes for: i) logistical support for moving tools and crew to construction areas or for public fleets; ii) municipal activities such as tow-trucks, small bucket trucks and specialized equipment and; iii) delivery on routes ranging from 100 - 150 km/day.

CNG driven truck have been available in the market since the early 2010s and are offered by multiple manufacturers. These trucks offer some emission reduction due to the lesser carbon intensity of natural gas. Ford is providing CNG and Propane as advanced fuel options to unleaded gasoline as an optional package on the 2022 Super Duty F-350 6.2L gas V8 model. This package enables a bi-fuel capability to run either liquified propane gas or unleaded gas. This package does not include natural gas/propane fuel tanks and lines, while the optional package provides hardened exhaust valves and valve seats only

Some of the manufacturers are focusing on hybrid and plug-in hybrid alternatives such as XL Fleet, Hino, etc. In terms of zero-emissions alternatives, the battery electric technology is currently being explored by various manufacturers like Motiv, Endurance, Rivian, Ram, etc. and various models are currently in the development pipeline. Bollinger has come up with two Class 3 truck designs- B1 and B2- with design B1 being a Sports Utility Truck while design B2 being a pick-up truck. More applications from Bollinger in the Class 3-6 range are expected based on Bollinger's all-electric platform and chassis cab design.

Hydrogen fuel cell or combustion based pick-up trucks are still in early development with no commercially available vehicle on market yet in this Class range.

Table 4.12 Class 3, 4 & 5 (Heavy Duty Truck) Alternative Technologies

Vehicle Characteristics	Current Fleet (Diesel)	Battery Electric	Electric Hybrid	Compressed Natural Gas

Image				
Make	Ford	Bollinger	Hino Trucks	Peterbilt
Model	F350	B2	195h	Model 567
Model Year	2019	2022	2022	2022
Starting MSRP	$51,000	$125,000	-	-
Fuel Efficiency (EPA-estimation)	20 MPG	47.3 MPG_e	-	-
EV Mode Range	-	322 km	-	-
Charging Time	-	75 minutes (Level 3) 10 hours (Level 2)	-	-
Engine/Battery Size	6.2L	142 kWh	5.0 L (Hybrid Engine)	11.9L (CNG)
Power	385 HP	600 HP	206 HP (Engine)	400 HP (Engine)

4.2.7 Class 6, 7 & 8 Propulsion Technologies (Heavy-Duty Truck Platform)

Heavy-duty trucks are generally employed by municipalities as dump (end/side) trucks, mixer trucks (cement/concrete), cross-gate hopper (road maintenance), septic trucks, water trucks, deck trucks, etc. They are critical tools in providing necessary municipal services within the respective jurisdiction. They are employed for heavy-duty tasks and therefore exhibit a high fuel consumption rate as compared to lower class vehicles. This makes them the preferential candidates for transitioning to low/no emission technologies as this transition enables economic and energy savings. Apart from the lower fuelling costs, potential cost savings are also realized from lower maintenance costs in case of electric power transmissions in technologies like battery-electric, hybrid-electric and fuel cells due to reduced wear and tear because of lesser number of moving components.

These potential benefits have resulted in low/zero emission technologies variants of higher class of trucks gaining more prominence among users. CNG versions of the higher-class trucks have been available in the market since early 2010s. Hybrid electric variants of larger trucks have also entered the markets towards the late 2010s. In addition, industries are also supporting the customers in transitioning their existing diesel-based versions to hybrid electric by providing conversion kits. Hyliion 6x4HE is an example of a brand and engine-agnostic electric hybrid conversion kit providing a battery-powered electric-hybrid powertrain with additional support from an auxiliary power unit.

Many manufacturers are currently in the process of developing fully battery-electric variants of higher-

class trucks with some options being currently available on the market. Lion8 battery electric truck has recently been launched with a battery pack that can be charged in two hours under Level 3 charging.

Table 4.13 Class 6,7 & 8 Alternative Technologies

Vehicle Characteristics	Current Fleet (Diesel)	Battery Electric	Electric Hybrid (Conversion Kit)	Compressed Natural Gas
Image				
Make	International	Lion Electric	Hyliion	Freightliner
Model	7600	Lion8	6X4HE	Cascadia Natural Gas
Model Year	2014	2022	2022	2022
Starting MSRP	-	-	-	-
Fuel Efficiency (EPA-estimation)	3.3 MPG	16.8 MPG_e	-	-
EV Mode Range	-	275 km	-	-
Charging Time	-	2 hours (Level 3)	-	-
Engine/Battery Size	12.4L	336 kWh	Engine agnostic	11.9 L (CNG)
Power	380 HP	470 HP	200 HP	400 HP

4.2.7.1 Class 6, 7 & 8 Truck Platform by technology

Table 4.14 Class 6,7 & 8 Trucks – Hydrogen Fuel Cell Alternatives

Hino XL8 (Prototype)

Nikola Tre FCEV (Available 2023)

Nikola Two FCEV (Available 2024)

Table 4.15 Class 6,7 & 8 Trucks – CNG Vehicles

Kenworth T880S

Table 4.16 Class 6,7 & 8 Trucks – Battery Electric Vehicles

Freightliner eCascadia

BYD 8TT Tandem Axle

Tesla Semi

Kenworth T680E

4.2.8 Class 7 Propulsion Technologies (Streetsweeper)

Streetsweepers constitute an important component of the public fleet as apart from keeping the streets litter-free and aesthetically pleasing, they prevent the dispersion of PM_{10} and $PM_{2.5}$ particles- detrimental

to both health and environment- into the atmosphere or into the drainage system. They also help to remove grit and salt residues as well. Streetsweeper comprise of specialized class 7 or 8 trucks with mechanical broom and suction systems.

Global launched its CNG version of the mechanized street sweeper system with a sweeping speed of 8-20 km/hour and a regular travel speed up to 90 km/hour along with a sweep rate of 3 tons per minute. It was followed up with another street sweeper model in the hybrid electric technology category comprising a diesel engine and electric drive motor and claiming 50% increase in fuel economy.

Global has also recently launched the battery electric variant of its streetsweeper with a 10-year battery life. This fully electric variant is capable of being fully charged with a SAE J1772 Level II charging system in 9-11 hours and in 4 hours through a Level III charging system.

There are a few other Hydrogen fuel cell-based variants at different stages of development. Global itself has developed a fuel cell powered variant Global M4ZE-Series which matches the operational performance of all the other technology variants of Global streetsweeper.

Table 4.17 Class 7 (Streetsweeper) Alternative Technologies

Vehicle Characteristics	Current Fleet (Diesel)	Battery Electric	Electric Hybrid (Plug-in optional)	Compressed Natural Gas
Image				
Make	Freightliner	Global	Global	Global
Model	Vacuum Sweeper	M4 BEV	M4 Hybrid	M4 HSD
Model Year	2015	2022	2022	2022
Starting MSRP	$200,000	-	-	-
Fuel Efficiency (EPA-estimation)	9.3 MPG	17 MPG_e	-	-
EV Mode Range	-	-	-	-
Charging Time	-	8-9 hours (Level 2) 4-5 hours (Level 3)	-	-
Engine/Battery Size	5.8L	210 kWh	6.7L	5.9L (CNG)
Power	200 HP	215 HP	200 HP	230 HP

4.2.8.1 Class 7 Streetsweeper alternatives by technology

Table 4.18 Class 7 Streetsweeper – Hydrogen Fuel Cell Alternatives

Global M4/M4 HSD Hydrogen Fuel Cell	Fulongma Hydrogen Fuel Cell Street Sweeping & Washing Truck- FLM5180TXSNJFCEV
Green Machines GM 500 H2	

Table 4.19 Class 7 Streetsweeper – Plug-in Hybrid Vehicles

Elgin Sweeper Broom Bear Plug-in Hybrid

Table 4.20 Class 7 Streetsweeper – Battery Electric Vehicles

Dulevo D.zero[2]	Bucher Municipal CityCat V20e

Table 4.21 Class 7 Streetsweeper – CNG Vehicles

TYMCO Model 500x	TYMCO Model HSP
TYMCO Model 600	

4.2.9 Class 8 Propulsion Technologies (Pumper Fire Truck)

Fire trucks are an integral component of public fleets and are required to deliver top performance with low response times.

The introduction of transitional technology-based vehicles has been recent with Magirus launching its Magirus (H)LF-CNG model in 2019 with a 400 litres CNG tank which imparts a range of 300 km with continuous pumping capability up to four hours. Other transitional technologies, like plug-in hybrids have recently been announced, such as the RT Rosenbauer, set to launch in 2022 with City of Brampton being the first municipality in Canada to place an order for the electric truck.

For this vehicle type, battery-electric zero-emissions options are more commercially advanced, with the Vector, produced by E-ONE having launched in 2021. The first order for the E-ONE has been placed by Mesa Fire and Medical Department, Arizona.

Table 4.22 Class 7 (Pumper Fire Truck) Alternative Technologies

Vehicle Characteristics	Current Fleet (Diesel)	Battery Electric	Plug-In Hybrid Electric	Compressed Natural Gas
Image				
Make	E-ONE	E-ONE	Rosenbauer	Magirus
Model	Typhoon	Vector	RT (Revolutionary Technology)	Magirus (H)LF iDL-CNG
Model Year	2015	2022	2022	2019
Starting MSRP	$505,000	-	$1.6 million	-
Fuel Efficiency (EPA-	-	-	-	-

estimation)				
EV Mode Range	-	-	-	-
Charging Time	-	-	-	-
Engine/Battery Size	8.9L	316 kWh	50 or 100 kWh battery	420L (CNG)
Horsepower	400 HP	268 HP	268 HP (Engine)	205 HP
Storage capacity	2952L (water)	4682L (water)	1000-4000L (water) 50-500L (foam)	1600L

4.2.9.1 Class 8 Pumper Fire Trucks alternatives by technology

Table 4.23 Class 8 Pumper Fire Truck – Battery Electric Vehicles

Magirus KLF iDL- Electric

Table 4.24 Class 8 Pumper Fire Truck –Hybrid Vehicles

Pierce Volterra

4.2.10 Class 8 Propulsion Technologies (Refuse Truck)

Refuse trucks are an essential public fleet constituent and comprise generally of Class 7 or 8 trucks. Given the heavy-duty application due to frequent starts and stops with heavy loads, these have conventionally been driven by diesel. Beginning in the early-2010s, we have seen CNG powered refuse trucks being adopted by public fleets which are able to serve the level of operations while providing a smaller carbon footprint.

Other transitional technologies, such as hybrid and plug-in hybrid technology-based options, have also begun to make their impact in this niche sector by the mid-2010s. Wrightspeed Route is a hybrid electric vehicle powertrain which can provide extended range capabilities to existing heavy duty truck platforms. The Route 1000 model is designed to support refuse truck applications and comprise of a range-extending gas turbine generator in addition to the battery pack.

Since heavy-duty vehicles are the biggest consumers of energy, their transition to zero-emission alternatives would have the most impact on an individual basis. Battery-electric alternatives have begun to enter the market, offering the first zero-emission options to the clients. The recent Lion8 Refuse REL truck has an automated arm for sideloading and collection body and is driven by Lion8 HV batteries.

The most advanced hydrogen fuel cell alternatives are still in the demonstration phase, with Europe being the geographic leader for the technology. One example is the Scania, which is currently undergoing the trial for its fuel cell-based Refuse Truck in Europe.

Table 4.25 Class 8 Refuse Trucks Alternative Technologies

Vehicle Characteristics	Current Fleet (Diesel)	Battery Electric	Hybrid Electric (Powertrain)	Compressed Natural Gas

Image				
Make	Freightliner	Lion Electric	Wrightspeed	Mack Trucks
Model	Packer	Lion 8P Refuse REL	Route 1000 Powertrain	LR
Model Year	2020	2022	2022	2022
Starting MSRP	$300,000	Est. $400,000	-	-
Fuel Efficiency (EPA-estimation)	-	17.2 MPG_e	-	-
EV Mode Range	-	276 km	38 km	-
Charging Time	-	2-5 hours (Level 3) 5-16 hours (Level 2)	-	-
Engine/Battery Size	8.9L	336 kWh	80 kW (Hybrid Turbine)	8.9 L (CNG)
Horsepower	380 HP	470 HP	400 HP	315-348 HP

4.2.10.1 Class 8 Refuse Trucks alternatives by technology

Table 4.26 Class 8 Refuse Truck– Hydrogen Fuel Cell Alternatives

Scania Hydrogen fuel cell Refuse Truck (Available in Europe)

Table 4.27 Class 8 Refuse Truck – Battery Electric Vehicles

Scania Hydrogen fuel cell Refuse Truck (Available in Europe)

Refuse Truck

Mack LR Electric

BYD 8R-All Electric Class 8 Refuse Truck

Peterbilt 520 EV Battery Electric Truck

Sea Econic EV

Table 4.28 Class 8 Refuse Truck –CNG Vehicles

New Way ROTOPAC

New Way Sidewinder XTR

4.2.11 Class 4 Propulsion Technologies (Loader & Backhoe Equipment)

The scope of this study is limited to on-street assets, however the City maintains a significant amount of construction equipment that contribute to its emissions. To serve as a starting point for future studies examples of loader and backhoe equipment is presented below. Other City owned off-street equipment includes forklifts, rollers, line painters, ice resurfacing machines, mowers, and handheld equipment.

Similar to fleets, pressure exists within the construction industry to transition away from GHG producing equipment. The primary driver for this is the significance of the emissions produced by the sector, which is exemplified by the 2018 IEA report that found the buildings and construction sector is responsible for 36% of the final energy use and 39% of energy and process-related CO_2 emissions in 2018.

Beyond meeting emission reduction targets, the industry is finding additional benefit with the adoption of low- and zero-emission technologies. Some examples include: a significant reduction in noise pollution and a lower overall cost of ownership (primarily from the reduced fuel costs).

This transition to low carbon technologies for construction equipment is less mature than the fleet technologies presented above. Several low-carbon alternatives are currently in states of development and pilot deployments from Volvo, Caterpillar, Bobcat, Wacker Neuson, and Hyundai.

Table 4.29 Class 4 (Loader Equipment) Alternative Technologies

Vehicle Characteristics	Current Fleet (Diesel)	Battery Electric	Battery Electric	Plug-In Electric Hybrid
Image				
Make	CASE	Volvo	Volvo	Huddig
Model	Excavator	ECR 25 Electric	L 25	1260T Tigon
Model Year	2016	2022	2019 (Europe) 2022 (North America)	2021
Starting MSRP	$179,000	-	-	-
Fuel Efficiency	20 litres/hour	-	-	-
EV Mode Range	-	4 hours	-	20 km (Travel) 2 hours (Excavation)
Charging Time	-	5 hours (level 2) 50 minutes (level 3)	8 hours (level 2) 2 hours (level 3)	1 hour (level 3)
Engine/Battery Size	-	20 kWh	39 kWh	-
Power	-	18 kW	35 kW	-

4.2.11.1 Class 4 Loader and Backhoe equipment by alternative technology

Table 4.30 Class 4 Backhoe – Hydrogen Fuel Cell Alternatives

JCB 220X (Under development)

Table 4.31 Class 4 Backhoe – Battery Electric Alternatives

John Deere E-Power (Under development)

Volvo EX2 (excavator)

4.3 Transit Vehicles Alternatives

Transit fleets have seen many zero-emission alternatives be developed and deployed. The preferred technology has primarily been battery electric however hydrogen fuel cell options have recently been announced and deployed.

4.3.1 Key Manufacturers

4.3.1.1 New Flyer Industries (NFI)

New Flyer is Canadian manufacturer based in Winnipeg, Manitoba. The company has a history of manufacturing diesel, hybrid, electric and CNG vehicles, having produced their first zero emissions bus in 1969. New Flyer has since grown its presence throughout the United States and Canada with major facilities in five states and two provinces. These facilities include five transit bus manufacturing facilities, three transit bus completion and service facilities, and one vehicle innovation centre.



New Flyer produces the Xcelsior family of buses which include a size range from 30' to 60' and six propulsion types. The battery-electric Xcelsior CHARGE models come in 35', 40', and 60' variants classified as XE35, XE40 and XE60 respectively. The battery-electric variants have multiple battery size specifications available that fall into two categories, rapid charge and long range.

4.3.1.2 Proterra

Proterra is an American automotive and energy storage company based in Burlingame, California. The company has a history of manufacturing compressed natural gas hybrid transit buses before transitioning their focus to manufacturing a range of electric buses and electric charging systems.



The Proterra ZX5 is the fifth and newest generation of battery-electric buses produced by the company. The ZX5 is a family of buses classified based on the size of the battery, they are in increasing order: ZX5, ZX5+, and ZX5 Max. These configurations can be equipped with either a Prodrive Drivetrain (a single 250kW Motor) or a Duopower Drivetrain (dual 205kW motors). The Duopower Drivetrain is more energy efficient and has better operating performance than the Prodrive Drivetrain, leading to higher maximum range, acceleration, and top speed.

4.3.1.3 Build Your Dreams (BYD)



BYD Auto is a Chinese multinational automotive manufacturer with a wide range of products. These automotive products include automobiles, buses, electric bicycles, forklifts, rechargeable batteries, and trucks. In addition to the diesel and hybrid buses, BYD produces three conventional battery-electric bus models: the K9S, K9, and K11. These vehicles come in respective lengths of 35', 40', and 60'. The highest capacity battery configuration for each vehicle is 266 kWh, 352 kWh, and 446 kWh resulting in maximum ranges of 350 km, 280km and 350km.

4.3.1.4 Nova Bus

Nova Bus is a Canadian bus manufacturer based in Saint-Eustache, Quebec. The company has 3 facilities, two in Quebec and one in New York State, and produces the popular LFS transit bus model.

The LFSe is the first fully electric drivetrain bus entry by Nova. The 40' vehicle was designed to operate 40 km blocks between charges using on-route charging infrastructure. The reliance of the LFSe model on the use overhead chargers may have contributed to their limited market adoption. Outside of demonstrations and trials the LFSe is only used by the Montreal Transit Corporation for limited-service runs.



The newer "LFSe+" is Nova's new long-range BEB which expands the with a maximum range of 340-470 km, it is also 40' in length. The new model incorporates dual charging options with both CCS plug-in chargers and an overhead pantograph charger capable of on-route charging. The maximum charging rate for the plug-in chargers is 150 kW, while the overhead charger is capable of 450kW.

4.3.1.5 Lion Electric Company

The Lion Electric Company is based in Saint-Jérôme, Quebec. Having sold their first bus in 2011 they have since released several fully electric vehicles. The company has an annual production capacity of 2500 vehicles and a build timeframe of 6-9 months.



One such vehicle is the LionM, launched in 2018 it is a 26' low-floor mini-bus that houses an integrated wheelchair ramp. The LionM can be equipped with one (1) or two (2) 80 kWh lithium-ion battery packs leading to a max range of 240 km. The base model is equipped with a 19.2 kW charger with the option of including an SAE-Combo DC fast charger. Furthermore, the vehicle is capable of battery swapping, allowing for fully charged batteries to replace depleted ones which can quickly return the minibus to delivering service. Lion Electric has also launched flat-footed fully electric minibus for school application termed as LionA, respectively. Later, it also came up with upgraded electric school bus models LionC and LionD, catering to different sizes.

4.3.1.6 Karsan

Karsan is a Turkish commercial vehicle manufacturer based in Kçalar, Nilüfer, Bursa Province. The company has a history dating back to 1966 of producing light vehicles. The company has a global annual production capacity of 65,000 vehicles, however none of that is in North America.



The company has since begun manufacturing an electric minibus called the Atak Electric. This 27-foot-long vehicle has a battery capacity of 220 kWh, resulting in a maximum range of 363 km. Another of its model JEST comprises of a 44kWh battery pack with a maximum range of 105 km. There are several charger configurations with either a single or double AC Type 2 charger capable of 22 and 44 kW, with an optional inclusion of a CCS Type 2 charger capable of providing DC fast charging at 80 kW. These charging rates respectively allow for charging times of 10, 5, and 3 hours when charging from empty to 80% capacity.

4.3.1.7 Grande West Transportation Group

Grande West Transportation Group is a Canadian bus manufacturer headquartered in Aldergrove, British Columbia, Canada. The company designs and engineers mid-size multi-purpose transit vehicles for public and commercial enterprises.



The Vicinity Lightning EV is their first battery electric mini-bus entry featuring a range of 200 km, which can be expanded further to 300km. The base model features four (4) 42 kW lithium-ion battery packs, three (3) of which are located in the floor with the last located in the rear compartment.

4.3.1.8 Optimal Electirc Vehicles

Optimal Electric Vehicles LLC (Optimal-EV) is an American electric vehicle manufacturer located in Plymouth, MI. The company has partnered with Proterra to release its first electric vehicle, the S1LF Electric shuttle bus.



The S1LF launched at the end of 2021 with a battery capacity of 113 kWh capable of serving a range of 200 km. Depending on the desired configuration, the vehicle will be able to support a maximum of 23 seats or 12 seats with support for up to three (3) wheelchairs. All configurations can support one (1) accessibility ramp.

4.3.1.9 Green Power Motor Company

GreenPower is headquartered in Vancouver, British Columbia, with primary manufacturing and fleet operations in Porterville, California. The company released its first purpose built BEB, the EV350, in 2017 but has since moved its focus to the zero-emissions min-bus model EV Star.

There are currently three variants for this model, the EV Star, EV Star +, and the EV Star ADA. The EV star + variant can carry more passengers than the base model, while the EV star ADA had been designed for accessibility with capacity for two (2) wheelchairs.



The company reports that the EV Star model has a life expectancy of ten (10) years and that model can be equipped with a Momentum Dynamics charging system to allow for wireless charging. The battery used by the EV star have a capacity of 118 kWh which gives them a maximum range of 240 km. Other optional configurations allow for the vehicle to be made fully autonomous using the Perrone Robotics AV System.

4.3.2 Comparative Summary of Battery Electric and Hydrogen Fuel-Cell Buses

The nature of transit service makes it an ideal opportunity for zero-emission alternatives. This has made resulted in many Canadian municipalities choosing to advance their implementation of zero emission technologies. Some transit operation characteristics that facilitate the deployment of zero-emission technologies include:

- **Fixed Duty-Cycles** (mileage and topography). These mitigate the concerns regarding range anxiety because the daily duty-cycle that vehicles need to be able to perform can be readily predicted and designed for.
- **Overnight Depot Storage**. Transit fleets are generally stored overnight at a depot, allowing for charging infrastructure to be sized to accommodate fleet needs with opportunities for

advantageous overnight charging rates.

- **Frequent Stops**. The stop-and-go requirement to serve frequent rider embarkments/debarments allows ZEBs to benefit from their regenerative breaking. Other propulsion technologies consume fuel and utilize their brakes for this function, whereas ZEB use energy to accelerate – a portion of which is recovered when using regenerative breaking.

The Table below summarizes the two prevailing ZEB technologies: BEB and FCEB.

Table 4.32 Summary comparison of ZEB Technologies

Characteristic	Battery Electric Buses (BEB)	Hydrogen Fuel Cell-Electric Bus (FCEB)
Range	**Approximately 200 – 250km** BEBs can service most City transit routes; some Commuter routes may be challenging to complete in worst-case.	**Approx. 300 km** FCEBs are capable of servicing long-haul commuter routes as well as shorter urban transit routes.
Propulsion	Battery Electric	Electric Fuel Cell
Vehicle Cost	$700k - $1.5m	$850k - $1.2m
Fuel Cost	Reflects current rate environment including energy charge per kWh and demand charge based on peak kW. Requires electric power supply unit and charging dispensers.	Reflects current cost level and existing supply infrastructure. Requires hydrogen fueling station.
Infrastructure Requirements	• Charging power supply units and dispensers (2-4 buses per power supply cabinets). • Optional battery storage and co-generation facilities.	• Hydrogen refueling station required (fuel pump) • On-site fuel storage infrastructure • Storage infrastructure
Operating Expenses	• Requires diesel auxiliary heater for full winter range • High operating demand charge environment requires overnight charging	• Hydrogen fuel costs • No electricity peak demand charge • No diesel aux. heater required
Capital Replacements	• Battery replacement (~6yrs)	• N/A
Expected Lifecycle	12-15yrs	

4.3.3 Transit Propulsion Technologies 35-40 Foot Transit Buses

The primary providers for ZEBs are Proterra, New Flyer, and Nova Bus, out of which New Flyer and Nova Bus are based out of Canada. All these three Original Equipment Manufacturers (OEMs) provide BEB options between 35' and 40'. New Flyer and a Belgian based manufacturer Van Hool also provide hydrogen fuel cell variant in 35-40 foot range. In addition to this, Nova Bus and New Flyer also provide

CNG and hybrid diesel-electric variants as well. Proterra and New Flyer have also introduced innovative financing options with Proterra also introducing options to lease bus and batteries.

Vehicle Characteristics	Current Fleet (Diesel)	Battery Electric Bus	Hydrogen Fuel-Cell Bus	Compressed Natural Gas Bus
Image				
Make	Nova Bus	Proterra	NFI	NF
Model	LFS	ZX5+	XHE40	XN40
Model Year	2018	2022	2022	2022
Starting MSRP	Approximately $0.5M	Approximately $1.0M	Approximately $1.5M	Approximately $0.75M
EV Mode Range	-	375 km	-	-
Charging Time	-	3 hours	-	-
Engine/Fuel/Battery Size	473 litres (Fuel capacity) 8.9 litres (Engine)	450 kWh	37.5 kg (750 kWhe)	3,300 SCF at 3,600 psi service pressure
Power	280 HP	336 HP	215 HP	250 HP

4.3.3.1 Transit Buses alternatives by technology (35-40 Foot)

Table 4.33 35′ & 40′ Battery Electric Bus

- Nova Bus LFSe (40′)
- Nova Bus LFSe+(40′)
- Proterra ZX5 (35′ & 40′)
- Proterra ZX5+ (35′ & 40′)
- Proterra ZX5 MAX (35′ & 40′)
- NF Xcelsior Charge NG (XHE35) (35′)
- NF Xcelsior Charge NG (XHE40) (40′)
- BYD K8M (35′)
- BYD K9M (40′)
- BYD K9MD (40′)

Table 4.34 35′ & 40′ Hydrogen Fuel Cell Buses

- Xcelsior Charge H2 (XHE40) (40′)
- Van Hool A330 FC

Table 4.35 35′ & 40′ CNG Buses

- Xcelsior CNG (XN35) (35′)
- Xcelsior CNG (XN40) (40′)
- Nova Bus LFS CNG (40′)

4.3.4 Transit Propulsion Technologies 60-Foot Articulated Transit Buses

Some of the top manufacturers for 60-foot articulated electric buses include New Flyer, BYD and Van Hool. New Flyer also produces a fuel cell variant of 60-foot articulated transit bus. Van Hool is currently scheduled to deliver its articulated fuel cell based bused outside Canada. Nova Bus and New Flyer also produce the 60-foot articulated bus in battery electric, hybrid electric and CNG variants.

Vehicle Characteristics	Current Fleet (Diesel)	Battery Electric Bus	Hydrogen Fuel-Cell Bus	Compressed Natural Gas Bus
Image				
Make	Nova Bus	NFI	NFI	NFI
Model	Arctic	XE60	XHE60	XN60
Model Year	2008	2022	2022	2022
Starting MSRP		Approximately $1.6M	-	-
EV Mode Range	-	240 km	-	-
Charging Time	-	3.5 hours	-	-
Engine/Fuel/Battery Size	8.9 Litres (Engine)	525 kWh	60 kg (1,000 kWhe)	3,300 SCF at 3,600 psi service pressure
Power	260 HP	430 HP	430 HP	250-320 HP

4.3.4.1 Transit Bus alternatives by technology

Table 4.36 60’ Articulated Transit Bus – Battery Electric Alternatives

BYD K11M

NFI XE60

4.3.5 Transit Propulsion Technologies 20-30 Foot

There are multiple battery electric options available within this size range. Ranges vary between 200 km and as high as 340 km. These options also range from regular public transit buses to smaller shuttle buses and cutaway buses. While there are no 20–30-foot buses in the City's fleet for now. a few variants are identified here.

Vehicle Characteristics	Current Fleet (Diesel)	Battery Electric Bus	Battery Electric Bus	Battery Electric Bus
Image				
Length	24′	25′	28′	30′
Make	Ford	Green Power	Optimal EV	BYD
Model	Handibus	EVA Star+	S1LF	K7MER
Model Year	2019	2022	2022	2022
Starting MSRP	-	-	$250,000	$775,000
EV Mode Range	-	240 km	200 km	315 km
Charging Time	-	Level 3: 2 hours	Level 3: 2 hours	Level 3: 3 hours
Engine/Fuel/Battery Size	6.8 L	118 kWh	Variants 113 kWh	266 kWh
Power	362 HP	150 kW	280 kW	300 kW

4.3.5.1 Transit Bus alternatives by technology

Table 4.37 20′-30′ Battery Electric Bus

- Karsan e-JEST (20′)
- Karsan Atak Electric (27′)
- Green Power EVA Star (25′)
- Green Power EVA Star+ (25′)
- Green Power EV250 (30′)
- Lion M (26′)
- Optimal EV S1LF (27′)
- Vicinity Lightning EV (28′)
- ARBOC Equess Charge (30′)
- BYD K7M (30′)
- BYD K7MER (30′)

5.0 Landscape Scan

This section presents a scan of the various approaches that municipalities across Canada are taking with respect to transitioning the corporate emissions to net-zero. This section will contribute to the overall assessment of the available policy options to identify the policies most relevant and suited for implementation at Saint John.

5.1 Municipal Green Fleet Landscape Scan

Wood has conducted an extensive landscape scan across Canada. The Table below provides a high-level summary of the approaches that a selected number of municipalities have adopted. The detailed assessment can be found in the subsequent section.

Table 5.1: Summary of the Landscape Scan for Municipalities

	Case Study	Targets	Technologies	Operations
1	City of Vancouver	• 100% Renewable diesel • 37% RNG into CNG supply • 200 EV in Public fleet by 2022 • Establishing 85 Level II charging stations and 4 DC fast charging stations • 85 hybrid or plug-in hybrid in Public fleet	• Renewable Diesel Fuel • Renewable Natural Gas • Compressed Natural Gas • Battery Electric	• Vehicle idling addressing with GPS and telematics system • Fleet size optimization and leasing options exploration
2	City of Abbotsford	• 20% by 2025 and 40% by 2040 against 2007 levels • Corporate emissions reduction through fleet replacement with alternative vehicles	• CNG and propane • 20% bio-diesel blends • Battery Electric Vehicle • Plug-in Hybrid Electric Vehicle	• Business-driven fleet replacement strategy with milestone targets • Benchmarking performance through Key Performance Indicators (KPIs) • Training for fleet maintenance
3	City of Lethbridge	• 40 % under 2018's levels by 2030	• Open to all technologies • Focusing on leveraging waste-to-energy locally • Identification of best solution based on triple bottom line analysis	• Identifying and integrating all stakeholders with multiple workshops to seek buy-in • Emissions and cost estimates for facility upgrades for fuelling/charging.

4	City of Toronto	• Transition 45% of City-owned fleet to low-carbon vehicles by 2030 • Reduction of greenhouse gas by 65% reduction by 2030 (from 1990 levels) • Net zero greenhouse gas footprint before 2050 (from 1990 levels)	• Accommodates different green technologies and renewable energy sources • Focus on fleet resiliency to address climate adaptation	• Comprehensive stakeholder inclusion including different City departments • Inclusion of installation as well as operational fueling requirements • Focus on climate change mitigation and adaptation in business continuity planning
5	Regional Municipality of Halifax	• Achieve net-zero municipal operations by 2030 • 100 DC fast and 1000 Level 2 charging ports by 2030 • 100% and 10-20% EV ready parking in new buildings construction. • 100% electrification of municipal light duty vehicles and reducing GHG emissions by 60%	• Electrification using EV, PHEV by using local, zero-carbon electricity • Renewable energy generation in municipal owned properties.	• Reduce residential waste and practice waste diversion • Advocating Zero-Emission Vehicle mandate provincially • Advocating federal and provincial purchase incentives for Zero-Emission Vehicle
6	City of St. John's	• 40% reduction by 2030 and a stretch target of 50% by 2030 from 2018 emissions • Committed to net-zero by 2050 • Expected annual decrease needed in emission: 4.2%	• Battery Electric Vehicles • Plug-in Hybrid Electric Vehicle • Other low-emission technologies	• Fuel Consumption Monitoring and Reporting • Updating all current and future equipment and vehicles with their estimated fuel efficiency and lifecycle costs • Improve Energy Efficiency
7	City of North Vancouver	• 80% emission reduction by 2040 and 100% reduction by 2050 from 2007 levels	• Low emissions vehicles- Battery Electric Vehicles, Fuel Cell Vehicles	• Developing fleet transition strategy • Developing charging infrastructure strategy • Developing Low Carbon Fleet Transition Roadmap

5.1.1 Landscape Scan 1: City of Vancouver

Municipality/City/Region	City of Vancouver
Project Title	Greenest City Action Plan

Project description

Objectives

Focused on reduced greenhouse gas emissions and fossil-fuel use in City-run buildings and vehicles. This plan is disaggregated into ten measurable goals and fifteen measurable targets on achieving Green operations at the corporate City level.



Key Solutions/Recommendations

The City has identified the following approaches and solutions to meet the challenge of transitioning to net zero. The solutions that have been identified include exploring various technologies and phased uptake targets along with integration of best practices and the optimization of fleet and operations.

Some of these are highlighted below:

Fuels/Technologies

- Renewable Diesel Fuel
- Renewable Natural Gas
- Compressed Natural Gas
- Battery Electric

Energy mix target

- Shifting from 5% Biodiesel to 100% Renewable diesel fuel
- RNG integration into CNG up to 37% with CNG constituting 12% of the energy mix

Fleet electrification

- Addition of around 145 light electric vehicles to the City's fleet with the total number of electric vehicles (including medium and heavy-duty vehicles) in the fleet expected to reach 200 by 2022
- Establishing dedicated charging stations for these vehicles which comprise of i) 85 Level II charging stations and; iii) 4 DC fast charging stations
- Addition of 85 hybrid or plug-in hybrid vehicles to the fleet

Operations optimization through telematics and best practices

- Vehicle idling and wasteful fuel use was avoided in over 1000 City vehicles with GPS and telematics systems
- Fleet size optimization with respect to vehicle end use and exploring/leveraging other funding/financing/leasing operation

5.1.2 Landscape Scan 2: City of Abbotsford

Municipality/City/Region	City of Abbotsford
Project Title	Fleet Replacement Strategy

Project Description

Key Policy Initiatives:



- 2019 Green Fleet Strategy in 2019
- Emission reduction target of 20% by 2025 and 40% by 2040 against 2007 levels under the City's Official Community Plan
- Green Fleet Strategy focuses on public fleet emissions to support the planning process for fleet replacement and renewal planning with a focus on alternative vehicle integration

Objectives:

Various elements of Abbotsford's fleet replacement strategy are listed below and focus on achieving their 2040 emission reduction targets. This project focused on the following:

- Determination of the best strategy for the City to meet their GHG reduction targets after considering five (5) different green fleet options for Class 1 through 8 vehicles
- Assessment of the asset inventory of fleet with their current emissions levels, current operation conditions and maintenance servicing levels
- Development of the fleet replacement strategy by developing the business case for alternative vehicles through modeling of capital, operating costs and GHG emissions
- Conduct of gap analysis to identify facility upgrades requirements
- Design of fuelling & charging Station

Key Solutions/Recommendations

Market Scan and feasibility assessment

- A comprehensive and comparative market, cost and environmental scan was conducted in terms of the cost and GHG emissions for: i) CNG and propane; ii) 20% bio-diesel blends; iii) Battery Electric Vehicles and iv) Plug-in Hybrid Electric Vehicles

Sustainability Targets

- A milestone-based phasing strategy was identified to achieve the objectives in a cost-efficient manner

User group concerns

- An assessment of alternative fuel technologies in various government fleet assets based on the costs and carbon footprint was conducted

Training Requirements for Fleet Maintenance

- Training opportunities covering the basics of electric propulsion, batteries, safety procedures and correct safety procedures and tools were identified

Identification of Key Performance Indicators (KPIs)

- Specific KPIs were identified to monitor the health and performance of the assets

5.1.3 Landscape Scan 3: City of Lethbridge

Municipality/City/Region	City of Lethbridge
Project Title	Corporate Environmental Sustainability Initiative (CESI)

Project Description



Key Policy Initiatives

- City of Lethbridge's Corporate Strategic Plan
- City's Corporate Environmental Sustainability Initiative (CESI) emerging out of the need to develop a corporate environmental management strategy
- CESI incorporates inputs from City's Transit and Waste and Recycling department regarding alternate energy vehicles in City's fleet

Objectives

The key outcomes of an in-depth study under CESI are as follows:

- Developed a roadmap to adopt a greener fleet, which will improve air quality, reduce greenhouse gas emissions and reduce the carbon footprint of the city using GHGenius
- Reduced the operational cost of the current conventional fuel system completed using the University of Toronto Bus Lab and Lifecycle tool
- Developed financial cost estimates for modifications to the facility, infrastructure upgrades and conceptual layouts of fuelling/charging options
- Determined best operational solution among options through Triple Bottom Line analysis
- Identification of risks associated with each fuel option and development of mitigating solutions

Key Solutions/Recommendations

User Acceptance of Technology

- Multiple workshops were conducted using MentiMeter engagement to ensure stakeholder buy-in in order to address concerns around technology readiness and acceptance from various fleet users

Infrastructure Cost

- Detailed discussions were conducted through the City's electric utility and ATCO around utility cost and rate payer discussion on upgrades to achieve a comprehensive infrastructure costing estimate

Sustainability Targets

- Detailed discussion within the City's team were conducted to understand targets and achieve them in a cost-efficient manner with a phasing strategy and GHG trade-off analysis

Technology Bias

- Detailed walkthroughs and discussions around technology adoption and learning gradient were carried out to address previous challenges with respect to novel technologies and challenges

5.1.4 Landscape Scan 4: City of Toronto

Municipality/City/Region	City of Toronto
Project Title	2019-2023 Green Fleet Plan (The Pathway to Sustainable City of Toronto Fleets Plan)

Project Description

Objectives



The core coal for this Green Fleet Plan is to achieve sustainable, climate resilient, low-carbon City fleets. This core goal was further subdivided into the following objectives:

- **Objective 1:** transition 45 percent of City-owned fleet to low-carbon vehicles by 2030
- **Objective 2:** 65 percent greenhouse gas reduction by 2030 (from 1990 levels)
- **Objective 3:** net zero greenhouse gas reduction before 2050 (from 1990 levels)

Key Solutions/Recommendations

Comprehensive stakeholder inclusion

This new Plan covers approximately 98 percent of all City owned and operated motor vehicles and equipment. It includes the following City department fleets:

Toronto Zoo	Toronto Parking Authority
Fleet Services Division (Centrally Managed Fleet)	Toronto Paramedic Services
Toronto Transit Commission (TTC)	Toronto Community Housing
Toronto Police Service	Exhibition Place
Toronto Fire Services	Toronto Public Library

Climate Adaptation

- Incorporation of climate change adaptation goals in order to ensure resiliency of the City fleets

Technology agnostic

- Accommodates different green technologies and renewable energy sources along with maximizing the use of renewable and sustainable fuels through production, distribution and consumption

Comprehensive focus

- Both the infrastructure installation as well as operational requirements related a larger deployment

Methodology and Strategy

- Estimation of the range imparted by viable power sources and integration of robust fleet asset management and state of good repair practices for climate change mitigation and adaptation
- Enhance the level of operational preparedness for extreme weather and other shocks to minimize service disruptions
- Integration of climate change mitigation and adaptation in business continuity planning to ensure continuity in climate resilient operations and services

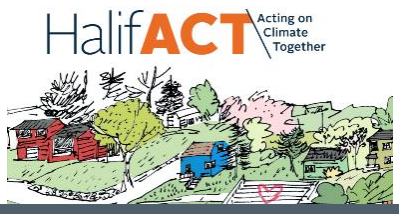
5.1.5 Landscape Scan 5: Regional Municipality of Halifax

Municipality/City/Region	Regional Municipality of Halifax
Project Title	HalifACT 2050, Halifax Regional Municipality Electric Vehicle Strategy

Project description

Objectives

Decarbonizing transportation remains one of the focus areas for action under Decarbonized and Resilient Infrastructure in the HalifACT 2050 plan. This was followed by the launch of Halifax Regional Municipality Electric Vehicle Strategy in November 2021.



Key Challenges

Some challenges to electrification and eventual decarbonization, as identified in the Electric Vehicle Strategy, are highlighted below:

- Incremental purchase cost of EV
- Home charging access for EV
- Range anxiety and public charging access
- Vehicle availability at dealerships
- Lack of Awareness

Key Solutions/Recommendations

Public Charging Infrastructure

- DC Fast charging: 100 ports by 2030 for urban/suburban areas and highway use in two Phases (2021-2025 and 2025-2030, respectively)
- Level 2 charging: 1000 ports by 2030 for on street and off-street use in two Phases (2021-2025 and 2025-2030, respectively)

Access to charging at home and workplace

- 100% EV ready parking in new residential construction
- 10%-20% EV ready parking in non-residential buildings

Municipal EV policies

- Advocating Zero-Emission Vehicle mandate provincially
- Advocating federal and provincial purchase incentives for Zero-Emission Vehicle

Electrifying municipal light duty fleet by 2030

- HalifACT 2050 has recommended Halifax Regional Municipality to adopt a resolution to achieve net-zero municipal operations by 2030. HRM Electric Vehicle Strategy targets 100% electrification of its light duty vehicles and reducing GHG emissions by 60%

Fuels/Technologies

- Electrification (municipal surface vehicles and fleet) such as BEV, PHEV for Pick-up Trucks, Car, Van and SUV using local, zero-carbon electricity

5.1.6 Landscape Scan 6: City of St John's

ST. JOHN'S

Municipality/City/Region	City of St. John's
Project Title	St. John's Corporate Climate Plan

Project description

Objectives

- Reduce Energy Intensity and Improve Energy Efficiency
- Create a Culture of Energy Conservation
- Increase Staff Energy Management Capacity & Knowledge
- Switch and/or Generate Energy to Reduce GHG Intensity
- Demonstrate Municipal Leadership



Key Solutions/Recommendations

Key Challenges

- Significant carbon footprint of transportation in corporate emissions (48%) in 2018 which is expected to increase to 60% in 2030

Goals

- 40% reduction by 2030 and a stretch target of 50% by 2030 from 2018 emissions
- Committed to net-zero by 2050
- Expected annual decrease needed in emission: 4.2%

Strategies

- Fuel Consumption Monitoring and Reporting
  - Updating existing vehicle inventory list to include all fuel-based and future non-fuel-based equipment and vehicles along with their estimated fuel efficiency and lifecycle costs.
- Public fleet electrification pathway development based on:
  - Corporate policy
  - Existing public fleet inventory and use
  - Differential capital cost forecast
- Low Carbon Vehicle Pilots for:
  - Piloting light duty low-carbon vehicles (BEV, PHEV)
  - Piloting heavy-duty fuel use emission reducing technologies
- Advanced Vehicle Replacement
  - Develop program to review cost of maintenance to the cost of replacement of fleet assets

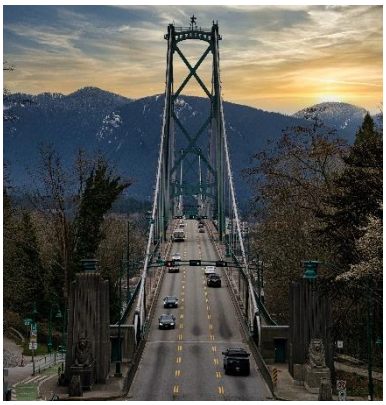
5.1.7 Landscape Scan 7: City of North Vacouver

Municipality/City/Region	City of North Vancouver
Project Title	Low Carbon Fleet Transition Roadmap

Project description

Objectives

- Identifying the most optimal pathway to Net-Zero emissions
- Detailed Fleet Transition Strategy (FTS) optimized to provide strongest financial case and GHG emissions reductions
- EV Charging Infrastructure Strategy (CIS) based on and supporting the FTS
- Informed capital and operational cost impacts of each of the above strategy
- GHG emission reduction modelling (annual and cumulative GHG emissions) of the Roadmap



Key Goals Identified

- Community-wide carbon emission reduction target of 80% reduction by 2040 and 100% reduction by 2050 based on 2007 levels, set in 2018
- Climate & Environment Strategy is under development and will include principles of Corporate Leadership plan requiring the City to transition to zero-emissions on an advanced timeline

Key Solutions/Recommendations

Some of the strategies that the City has identified for implementation while transitioning to zero corporate emissions are described below:

Fleet Transition Strategy (FTS)

- Updating existing vehicle inventory list comprising fuel-based equipment and vehicles along with their estimated fuel efficiency, associated lifecycle costs along with the detailed replacement plan
- Projecting the existing vehicle inventory list into the future and taking into consideration new alternative energy-based vehicle alternatives

Charging Infrastructure Strategy (CIS)

- Identifying the charging infrastructure that will be required based on the fleet requirements as replacement levels as identified in the FTS
- Estimating the cost associated with the projected charging infrastructure requirements
- Differential capital cost forecast

Low Carbon Fleet Transition Roadmap

- Assessing various pathways to net-zero corporate emissions based on associated costs (capital and operational) for vehicle fleet and equipment estimated through financial modelling
- Assessing various pathways to net-zero corporate emissions based on associated carbon footprint for the vehicles and infrastructure estimated through GHG modelling

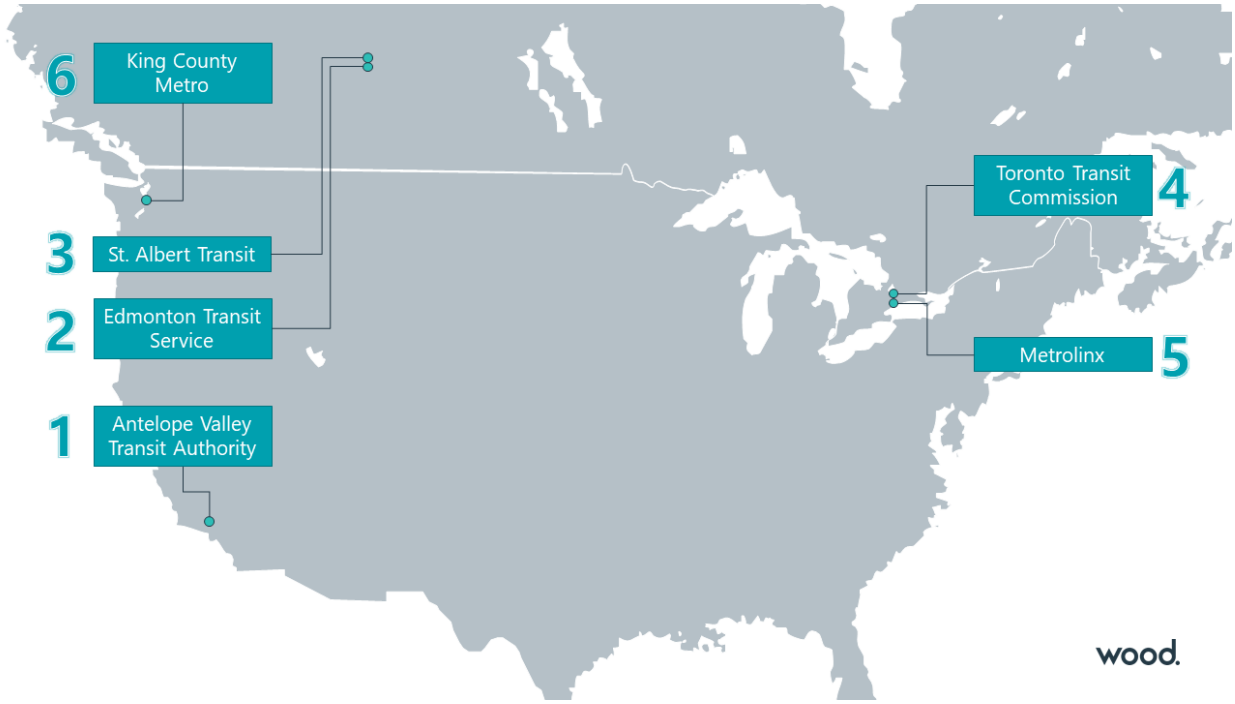
5.2 Zero Emission Transit Case Studies

Here is a summary table of the case studies showing their unique and shared characteristics.

Table 5.2. Case Study Summary Table

#	Case Study	# Buses	# BEB	Service population	Chargers Used	Highlight / notable point
1	Antelope Valley Transit Authority	90	45+	450,000	Plug-in Inductive	• Similarly sized agency • Committed to 100% Zero Emissions Fleet • Warm climate
2	Edmonton Transit Service	1,000+	60	820,000	Plug-in Overhead	• Large transit agency • BEBs primarily use pantograph chargers. • Cold climate
3	St. Albert Transit	63	7	66,000	Plug-in	• Small agency • Serves neighbouring municipality • Cold climate
4	Toronto Transit Commission	3,500+	60+	6,400,000	Plug-in	• Very large agency • Largest BEB Fleet in Canada • Committed to 100% Zero Emissions Fleet
5	Metrolinx	706	2*	9,360,000	Plug-in	• Crown agency tasked with managing and integrating road and public transit • Large transit agency (GO Transit)
6	King County Metro	1,600+	11 BEBs 174 ETBs	4,000,000	Plug-in Overhead	• Very large agency • Committed to 100% Zero Emissions Fleet • Coastal climate

**The Metrolinx BEB are not active as their electric bus pilot launch has been delayed due to COVID-19*



Antelope Valley Transit Authority (AVTA)

The AVTA was the first agency to commit to 100% electrification. With a fleet of 90 vehicles, its size and services are at a scale similar to Oakville transit.

Edmonton Transit Service (ETS)

The ETS is a large transit organisation operating in a very cold climate that is incorporating a substantial number of electric buses – currently 40. Notably all BEBs are primarily dependent on pantograph chargers.

St. Albert Transit (StAT)

The St.AT was the first Canadian municipality to own long range BEBs, in part due to their need to service many connections to a neighbouring larger municipality.

Toronto Transit Commission (TTC)

The TTC is a very large transit authority that has piloted the implementation variety of BEB. There is an opportunity to leverage TTC's experience with incorporating BEB to instruct Saint John transit's adoption.

Metrolinx

Metrolinx is a Crown Agency tasked with managing and integrating road and public transit in the Greater Golden Horseshoe Region. It is responsible for managing the electronic fare system used in the region. This agency is focused on servicing longer trips associated with regional travel.

King County Metro (Metro)

Metro is a very large transit authority that has committed to 100% zero emissions fleet by 2040, which will require 2,200 BEB/ETB. The majority of their current zero emission buses are electric trolley buses (ETB), though the agency is looking to integrate an increasing number of BEB.

5.2.1 ZEB Case Study 1: Antelope Valley Transit Authority

Key highlights:
- Primarily fleet ranging in sizes
- Similarly sized agency
- Committed to 100% Zero Emissions Fleet
- Warm climate

Name: Antelope Valley Transit Authority (AVTA)

Service population: 450,000

Number of electric buses: 45+ **Total fleet size:** 90

Summary

The AVTA services the cities of Lancaster, Palmdale, and unincorporated portions of northern Los Angeles Country, California. In 2016, the AVTA makes history by voting to purchase up to 85 new all-electric zero emission buses from BYD, officially becoming the first transit agency in the nation to commit to a 100% electric fleet.

In 2017, AVTA was the first agency to operate a zero emission 60' articulated bus in revenue service, and also completed the first ever WAVE inductive charging system in Southern California.

- Operates a network of 13 local transit routes, 6 commuter routes, 3 supplemental school routes;
- 58 buses dedicated to local service, 30 buses dedicated to commuter service; and
- Provides urban and rural "Dial-a-Ride" service;

Highlights

- Antelope Valley Transit Authority is operated under contract by Transdev and offers connecting services with Metro and Metrolink.
- Completed one million miles in May 2019, the equivalent of 250,000 gallons or $300,000 of fuel savings



Relevance to Saint John: Combination charging system implementation

Fleet Number Range	Year	Manufacturer	Model	Notes
27901-27908	2019	GPMC	EV Star 27'	
40089-40090	2020	BYD	K9	
40450-40451	2014	BYD	K9	
40452-40454	2014	BYD	K9	
40856-40875	2018	BYD	K9	2017 models
40976-40988	2019	BYD	K9	
60701-60705, 60707-60711	2017	BYD	K11M	
40856-40875	2017	BYD	K11M	Delivered in 2019

5.2.2 ZEB Case Study 2: Edmonton Transit Service

ETS

Key highlights:
- Large transit agency
- BEBs primarily use pantograph chargers.
- Cold climate

Name: Edmonton Transit Service

Service population: 820,000 **Service Area:** 700 km^2

Number of electric buses: 60 **Total fleet size:** 1000+



Summary

The ETS services the city of Edmonton with regional service to surrounding municipalities. In 2020, ETS became the first transit agency in North America to use overhead charging infrastructure to charge its 40 Proterra ZX5 40' E2 Max buses. Since this initial deployment ETS has procured 20 additional BEBs from Proterra.

- Operates a network of 191 bus routes, 230 school routes, and 2 light rail transit (LRT) lines.
- Over 1000 buses are used to service these routes with the LRT lines serviced by close to 100 light rail vehicles.

The charging infrastructure for the electrified feet was installed in the Kathleen Andrews Garage and included 26 ABB 150 kW overhead chargers and seven (7) 60 kW Proterra plug-in chargers. When vehicles connect to the charging system, a fleet management software system initiates charging at designated times to optimize energy usage and limit the maximum power draw of the facility. APEX Connected Vehicles Intelligence System is used to monitor ETS fleet and report on the state of charge, charger status, bus efficiency, distance traveled, etc.

In 2015, ETS ran a pilot study with several buses to determine the impacts of the region's climate, topography, and broad geographic transit area. The result showed that electric heaters consume between 20% and 25% more energy per kilometer, which could be mitigated using diesel fueled auxiliary heaters.

Highlights

- All regular ETS buses are equipped with Smart Bus Technology, providing real time data to both customers and ETS control.
- All ETS BEBs are equipped with overhead pantograph chargers to limit space requirements for facility storage.



Relevance to Saint John: Integrated use of depot plug-in and overhead (pantograph) chargers

Fleet Number Range	Year	Manufacturer	Model	Notes
8000-8039	2019-20	Proterra	ZX5MAX	

5.2.3 ZEB Case Study 3: St. Albert Transit

Key highlights:
- Small agency
- Serves neighbouring municipality
- Cold climate

Name: St. Albert Transit

Service population: 66,000

Number of electric buses: 7 **Total fleet size:** 63

Summary

The StAT services St. Albert with local routes while operating several express connect to directly to Edmonton destinations. Additionally, a local dial-a-ride is provided to further supplement accessibility options. In 2017, StAT deployed its first BEBs and has continued to adopt more into their fleet, which has led the agency to winning the Emerald Award, one of the province's most prestigious environmental honours.

- Operates a network of 15 local bus routes, 3 Dial-a-Ride routes, and 7 express Routes into Edmonton.
- This network is served by 52 buses, supplemented by 11 para-transit vehicles.
- St. Albert has deployed a 301kW solar panel system at the Dez Liggett Transit Facility, which supplies approximately one-third of the building's electricity. The aim of this installation is to both offset the peak energy demands of the facility and further the agency's environmental goals.

Highlights

- The number of daily transit trips has increased by nearly 9,000 between 2005 and 2021.
- St. Albert was happy with the initial deployment of (3) long-range BEB and have continued growing their electrified fleet by adopting four (4) more, with plans to expand further.
- In 2017, the City of Edmonton and the City of St. Albert Councils signed a Memorandum of Understanding (MOU) to begin taking steps to develop a Regional Transit Services Commission.



Relevance to Saint John: Use of BYD technology, including LFP batteries and 80kW plug-in chargers.

Fleet Number Range	Year	Manufacturer	Model	Notes
1400-1402	2017	BYD	K9S	First BEB in St. Albert
1403-1406	2018	BYD	K9S	

5.2.4 ZEB Case Study 4 Toronto Transit Commission

Key highlights:
- Very large agency
- Largest BEB Fleet in Canada
- Committed to 100% Zero Emissions Fleet by 2040

Name: Toronto Transit Commission (TTC)

Service Population: 3.0 Million	**Annual Ridership:** 525 Million
Number of electric buses: 60	**Total fleet size:** 3500+

Summary

The TTC is Canada's most heavily used transit system (3rd in North America), serving 2.76 million trips on an average weekday (2019). Vehicle electrification is a key component of the city's TransformTO climate action strategy, which targets an 80-percent reduction in local greenhouse gas emissions by 2050.

- Operates a network of over 150 bus routes, 4 subway lines, and 10 streetcar routes.
- The TTC has approximately 2563 buses (conventional/wheel-trans/community), 204 streetcars, and 878 rapid transit (subway/RT) cars in the active fleet

Throughout the adoption of their first 60 BEB, TTC allocated approximately half of their $140 million dollar funding from the federal Public Transit Infrastructure Fund to install charging infrastructure at Arrow Road, Mount Dennis, and Eglington bus garages. Two of these facilities are equipped with DC fast charging to support Proterra and New Flyer BEB, while the remaining facility has been equipped with an AC charging system to accommodate BYD models.

The TTC is currently testing the effects on battery capacity that come from maintaining passenger comfort (heating and cooling the cabin). They found that effects of air-conditioning in the summer reduced battery capacity by 15%. The winter testing still in progress to determine the effects of heating BEBs using an auxiliary heater.

Highlights

- Leading operator of BEBs in Canada with 60 buses comprised of three different models, each from a different manufacturer.
- Aims to be a zero-emissions fleet by 2040.
- Plans to develop specifications for its electric bus fleet and order 300 more in 2023



Relevance to Saint John: The TTC is currently testing a variety of BEB models in varied operating conditions.

Fleet Number Range	Year	Manufacturer	Model	Notes
3700-3724	2018-19	New Flyer	Xcelsior XE40	First TTC Battery Electric Buses
3725-3749	2019	Proterra	Catalyst BE40	
3750-3759	2019	BYD Auto	K9M	

5.2.5 ZEB Case Study 5: Metrolinx

Key highlights:
- Crown agency tasked with managing and integrating road and public transit
- Large transit agency (GO Transit)

Name: Metrolinx

Service Population: 9.36 Million	**Annual Ridership:** 74 Million
Number of electric buses: 2 on order (GO)	**Total fleet size:** 1671 (706 buses)

Summary

Metrolinx is a Crown Agency that is tasked with managing and integrating road and public transport in the Golden Horseshoe Region and Ottawa* (Metrolinx's role in Ottawa is limited to fare collection). The agency is responsible for the implementation and management of the Presto card, the electronic fare system used in all public transport systems in the Greater Toronto and Hamilton Area. Metrolinx aims to support local municipalities through programs like Smart Commute and the Transit Procurement Initiative which aim at reducing emissions and increasing transit efficiency. Additionally, Metrolinx operates GO Transit and the Union Pearson Express where it has committed to expanding the electrification of its rail network.

- Through GO Transit, Metrolinx operates a network of 42 bus routes and seven (7) rail lines.
- The Metrolinx fleet contains approximately 706 buses, 90 locomotives, 139 cab coaches, and 736 rail coaches.

Metrolinx is close to beginning their pilot for its new Enviro500EV, however the launch has been delayed due to COVID-19. Metrolinx has not committed to an electrification target for its bus fleet.

Highlights

- Presto has been fully implemented in 11 transit systems.
- The Transit Procurement Initiative has supported 21 municipalities and transit agencies, to purchase over 400 buses, and has saved an estimated $5 million.
- Two fast chargers have been installed at the Steeprock Bus Storage Facility in anticipation of electric vehicle pilot.



Relevance to Saint John: Regional transit management with a focus on intercity/regional transit (long route)

Fleet Number Range	Year	Manufacturer	Model	Notes
4000-4001	2021	ADL/Proterra	Enviro500EV "SuperLo"	GO Transit

5.2.6 ZEB Case Study 6: King County Metro Transit Department

King County

Key highlights:
- Very large agency
- Committed to 100% Zero Emissions Fleet
- Coastal climate

Name: King County Metro (Metro)

Service Population: 4.0 Million	**Annual Ridership:** 122 Million
Number of electric buses: 11 BEBs and 174 ETBs	**Total fleet size:** 1600+

Summary

Metro is the county-wide bus transit system which serves King County Washington, which includes Seattle. It is the eight largest transit bus agencies with close to 400,000 weekday passengers. A high proportion of Metro's passengers are commuters, which has led to over 100 of its 215 routes being peak hours only, with many of those only operating in one direction at a time.

Similar to the PRESTO card deployed throughout Ontario's GTA, Metro participates in a regional smart card program called ORCA, where it is joined by six other transit agencies in the region.

- Metro operates a network of over 215 bus routes, which include approximately 26 Dial-A-Ride-Transit routes (Accessibility focused routes which can deviate to drop off and pick up passengers).
- Metro operates over 1600 buses which includes 174 electric trolly buses (ETB) and 11 battery-electric buses (BEB).
- The 132 park-and-ride facilities serve the commuter focused ridership of the Metro

Metro's conceptual plan for its charging infrastructure a its interim facility will include 100 pantograph down fast chargers with 35-50 plug in chargers. This equipment will later be moved to larger permanent facility as electrification continues.

Highlights

- Metro has committed to move to a 100% zero emissions fleet by 2040. This will require 2,200 BEBs and BETs.
- Metro is currently testing 11 BEBs for performance and reliability for King County operating conditions.



Relevance to Saint John: High proportion of passengers are commuters

Fleet Number Range	Year	Manufacturer	Model	Notes
4601-4603	2015	Proterra	Catalyst BE40	
4604-4611	2018	Proterra	Catalyst BE40	

6.0 Future State Analysis

The objective of this section is to assess the opportunities, risks, challenges, and solutions associated with the adoption of various alternative technologies and their suitability for City operations in close collaboration with various user groups.

While developing the proposed roadmap to zero-emissions, Wood will ensure consensus among key stakeholders from various user groups with respect to the chosen technology alternatives and deployment timeline. The key criterion for vehicle selection will be its ability to meet the operational requirements of the respective user groups.

In terms of the assessment of the operational alternatives, Wood's approach will involve assessing various zero- or low- emission technologies against the specified criteria of meeting operational requirements. Wood has developed an approach with respect to the evaluation of alternative technology options for replacing the City's existing fleet. This approach will give preference to technologies that result in zero-tailpipe emission technologies (battery-electric, hydrogen fuel cell). If the zero-emission technologies are not able to support the required operational profile of the respective user groups, other low emission technologies such as CNG-RNG engines, hybrid battery-diesel/CNG technology options, including plug-in hybrid options will be considered. In the event of these low emission technologies failing to meet operational requirements, Wood would evaluate optimization techniques such as right-sizing the vehicle fleet and the introduction of new assets (high speed chargers, vehicle-to-vehicle chargers, and fleet expansion) to meet the City needs – this is explored in Section 8.3.

The final listing of the alternatives will be presented to all municipal departments for their approval.

6.1 Future State Considerations – Public Fleet Vehicles

The City has committed to reduce its corporate GHG footprint by 30% by 2025 and to achieve carbon neutrality by 2040. To achieve this target, the City has planned to transition its public fleet to zero-emission by 2040. The roadmap to achieve this transition will consider the following factors:

- Lifecycles of the vehicles in the public fleet
- Current procurement orders
- Procurement cycles
- Municipal departmental operational requirements and needs
- Availability of fuelling supply
- Availability of required infrastructure
- Facility modification requirements
- Commercially available technologies
- Policies implemented in other Canadian jurisdictions

To ensure that the final roadmap meets the short- and long-term corporate goals while ensuring minimal disruptions to the current operations, Wood has reached out to the Operational Managers representative of the City's departments to seek their feedback through a User Group Survey and through focus group discussions. The user groups include:

- Utility & Infrastructure
    - Infrastructure-Asset Management
    - Saint John Water-Drinking Water
    - Saint John Water- Storm Water
    - Saint John Water- Wastewater
    - Saint John Water- Water and Sanitary Engineering

  - Saint John Water- Utility Business Manager
- Police
- Fire & Emergency Management
- Public Works and Transportation
  - Fleet Management
  - Parks and Public Spaces
  - Fleet Management
  - Pedestrian and Traffic Management
  - Roadway Maintenance
  - Sidewalk Maintenance
  - Solid Waste Collection
- Transportation and Environment- Parks and Public Spaces
- Agencies, Boards and Commission
  - Parking Commission

These interactive surveys and focus group sessions provided key information to Wood with respect to the duty cycles, application and other insights into vehicle use for user group.

6.1.1 User Group Survey

A User Group Survey was carried out to solicit preferences from each user group.

	Questions
1	What are the top 3 benefits you anticipate with the transition to alternatively fuelled vehicles in your fleet?
2	On a scale of 1 to 5 (1 being low and 5 being high), what level do you believe your department is ready to transition to alternatively fuelled vehicles?
3	If low carbon fleet transition is implemented, what type of fleet mix would you prefer?
4	Have you received feedback from other municipalities/transit agencies on their experience operating alternative fuel propulsion vehicles (i.e., CNG/RNG, hybrid-electric, biodiesel, hydrogen, electric)? If you answered "Yes" to previous question, what was their feedback?
5	Have you thought about how the 2025 and 2040 public fleet emission goals will be met and the impact on your fleet vehicles? If you answered "Yes" to previous question, please provide your views on the strategy to be used to achieve the public fleet goals.
6	On a scale of 1 to 5 (1 being low and 5 being high), how likely do you think the City can achieve its corporate goals using alternatively fuelled vehicles? (30% reduction by 2025, and carbon neutrality by 2040)
7	What is the first word that comes to mind when you think of an electric/hydrogen fuel cell vehicle?
8	What is the first word that comes to mind when you think of a CNG fuelled vehicle?
9	Please provide your thoughts on the life expectancy of your fleet vehicles.

10	What are your expectations for battery electric vehicles' battery life?
11	Are you concerned about Electric Vehicle (EV) technology becoming outdated faster than conventional vehicle technology? Example being EV batteries becoming more efficient and less expensive. If you answered "Yes" to previous question, would you consider swapping advanced batteries that may be available in the future?
12	What are your thoughts about disposal for end-of-life EV and their batteries?
13	For the near term to reduce Green House Gas (GHG) emissions, are you willing to adopt alternative fuels such as biodiesel and CNG/RNG for heavy-duty vehicles?
14	On a scale of 1 to 5 (1 being low and 5 being high), what level do you see alternative fuels such as CNG/RNG being successful in replacing conventional diesel heavy-duty vehicles 1:1?
15	For your fleet operations, do you have a preference on the alternative fuel propulsion technology to be favoured for further considerations? Electric / CNG/RNG / Biodiesel / Hydrogen Fuel Cell / Others
16	If "Others" was chosen in the previous question, please provide the propulsion type:
17	Where are your vehicles predominantly parked, specifically during extreme cold weather conditions?
18	Do you monitor Fleet Key Performance Indicators (KPIs) using GEOTAB and other information management systems? If you answered "Yes" to previous question, please share the KPIs that you monitor
19	Do your fleet vehicles have high idling as a functional requirement? If you answered "Yes" to previous question, please share your concerns on how the high idling would possibly hinder low carbon fleet transition with EV technology
20	Please provide your department fleet vehicle spare ratio.
21	How are vehicles assigned to individuals and tracked?
22	How are vehicles assigned to specific functions? Please provide high-level logic for each vehicle category that will enable us to understand the various duty cycles and operating requirements.
23	What do you believe would be the most significant operational challenge for introducing Electric/Hybrid/Hydrogen Fuel Cell vehicles into your fleet?
24	What do you believe would be the most significant operational challenge for introducing CNG/RNG heavy-duty vehicles into your fleet?2
25	In the case of EVs, where would you prefer to charge your vehicles?
26	Please provide some of the benefits you anticipate with facility charging and fast/on-route charging
27	What are some of your concerns for fast/on-route charging stations? Examples include service

	delays, peak demand pricing, grid reliability.
28	Are you concerned about local dealer support for maintenance and parts availability?
29	Are you concerned about the local availability and resiliency of alternative fuels such as biodiesel, CNG, and RNG?
30	Would you prefer to Buy or Lease new technology alternatively fuelled vehicles for your fleet?
31	What are your concerns and opinion on the electrical/fuel infrastructure and facility modifications required to host the alternatively fuelled fleet vehicles?
32	Which alternative fuel technology do you think is the way forward to meet the Public fleet GHG emission targets?
33	If 100% green fleet transition needs to be successful, do you think a fully developed pilot program followed by a robust monitoring program is required? If you answered "Yes" to previous question, please provide your thoughts on the expectations for the pilot program.
34	Which specific functions/vehicles in your department do you think are ready for a pilot with the deployment of alternative fuel technology? Please identify the most suitable technology.

Wood received a total of 14 responses from the user groups and follow-up stakeholder sessions were developed based on the feedback received. The follow-ups served as interactive question-and-answer sessions to solicit broader group discussion and identify the viability of each technology in terms of user group needs.

6.1.2 Class 1 Propulsion Technologies (General Purpose and Police vehicles)

Class 1 General Purpose vehicles are used extensively by all of the City's municipal departments with a total fleet size of 69 of which 23 are Police vehicles. Numerous zero- and low-emissions alternatives in this class are commercially available. Given the relatively low-duty application and the general-purpose deployment of these vehicles, most of the fleet vehicles can be readily transitioned to zero-emission alternatives using battery-electric vehicles. However, some of the municipal departments have also identified critical operational requirements that the potential replacement need to meet. For these specific municipal departments, the selection of replacement alternatives will incorporate testing against these specific requirements.

The Tables below highlight the key insights gained from the User Group Survey responses and focus group sessions.

6.1.2.1 Public Works & Transportation

Table 6.1 Future State Considerations for Class 1 Vehicles for Public Works and Transportation

Class 1 Propulsion Technologies (General Purpose)	Public Works & Transportation
Opportunities	The commercial availability of multiple zero-emission variants from different manufacturers provides a direct pathway to switch to zero-emissions vehicle for Public Works & Transportation. Given that these vehicles constitute a significant component of the entire fleet

	(approximately 28%), their direct transition to zero-emissions variants can lead to significant decrease in emissions. The presence of multiple manufacturers in this class also provides an opportunity to leverage competitive pricing for vehicle procurement and long-term contracts for maintenance. The procurement schedule has also identified several scheduled procurements for vehicles of this class all the way to 2030. The ready availability of zero-emission vehicles provides an opportunity to initiate the transition to zero emission sooner and at a faster pace.
Constraints	The operational requirements for the vehicles of Public Works and Transportation include year-round reliability for the vehicles, including in the months of winter to ensure timely delivery of municipal services. Additionally, high idling times and the need for adequate internal volume for the comfort of the staff are critical requirements. Due to their minimal down-time allowance, these vehicles are expected to adhere to a high level of operational readiness. A particular constraint with procuring transitional technology vehicles is futureproofing as they are expected to be soon replaced by zero-emission vehicles.
Risks	Class 1 vehicles generally comprise of sedans and smaller vehicles which might exhibit a challenge with respect to the volume requirements. These vehicles are generally equipped with battery of small to medium size. Most of the new zero-emissions and transitional technologies variants are currently deployed in areas with moderate climatic conditions. The performance of these vehicles in the New Brunswick climatic conditions could pose a significant challenge. Installing fast chargers for shorter turn arounds will require identifying new locations in case the existing depots are not able to accommodate them which will result in extensive refurbishment and civil works requirements. Given the pace of evolution for zero-emission technologies, it is expected that the vehicle ranges will continue to increase along with better safety features and reliability. Therefore, any procurement of hybrid diesel electric and CNG vehicles poses a risk to the municipalities of getting "locked-in" into these transitional technologies for the duration of their operational lifetime or risk additional expenditure or value loss on prematurely replacing or selling the existing assets. Therefore, any procurement of hybrid diesel electric and CNG vehicles poses a risk to the municipalities of getting "locked-in" into these transitional technologies for the duration of their operational lifetime or risk additional expenditure or value loss on prematurely replacing or selling the existing assets.
Solutions	The most optimal solution for this class of vehicles would involve a phased transition. This will involve managing the transition to zero-emissions in phases with the first phase focusing on the procurement of hybrid-electric variants starting 2022 onwards to 2023. This will be followed by the procurement of battery electric variants in the next phase 2023 onwards. There are several options for market for zero-emissions Class 1 vehicles generally comprise of sedans and smaller vehicles which might exhibit a challenge with respect to the volume requirements. These vehicles are generally equipped with battery of small to medium size. Most of the new

	zero-emissions and transitional technologies variants are currently deployed in areas with moderate climatic conditions. The performance of these vehicles in the New Brunswick climatic conditions could pose a significant challenge. Installing fast chargers for shorter turn arounds could be a solution which will, however, require identifying adequately suited locations.

6.1.2.2 Fire Department and Police

Table 6.2: Future State Considerations for Class 1 Vehicles for Fire Department and Police

Class 1 Propulsion Technologies (Police Vehicles)	Fire Department and Police
Opportunities	The commercial availability of multiple zero-emission variants from different manufacturers provides a direct pathway to switch to zero-emissions vehicle for Fire & Police. The Police have already adopted hybrid electric vehicles and the positive experience has demonstrated a great institutional buy-in into fleet transitioning. Given that there are 23 Class 1 Police cruisers currently in the Saint John Police fleet, they have gained confidence and operational experience in managing transitional energy vehicles that provides an opportunity for a direct transition to zero-emission operations. Class 1 sedans are also deployed by the Fire Department for general transportation, the vehicle sometimes includes emergency lights and sirens so that emergency staff can respond more quickly. The high idling requirements that have been identified as a critical operational necessity for both the Police and Fire Department can lead to a significant cost burden using IC engines. Shifting to highly efficient battery electric systems may lead to reduced operating costs due to the lower energy consumption when idling. The presence of multiple manufacturers in this class also provides an opportunity to leverage competitive pricing for vehicle procurement and long-term contracts for maintenance. The procurement schedule has also identified several scheduled procurements for vehicles of this class up to 2030.
Constraints	The operational requirements for the vehicles of the Fire Department and Police include high levels of reliability, high idling requirements, large internal volume for staff comfort and a measure of safety assurance associated with the vehicles. The adequate level of safety assurance required for policing operations could be challenging for Class 1 vehicles based on alternative energy propulsion. Due to their minimal down-time allowance, these vehicles are expected to adhere to a high level of operational readiness. A particular constraint with procuring transitional technology vehicles is futureproofing as they are expected to be soon replaced by zero-emission vehicles.
Risks	Class 1 vehicles generally comprise of sedans and smaller vehicles which might exhibit a challenge with respect to the volume requirements. These vehicles are generally equipped with a small to medium sized battery. As the majority of the new zero-emissions and transitional technologies

	variants are currently deployed in areas with moderate climatic conditions, the performance of these vehicles in the New Brunswick climatic conditions is unknown and could pose a significant challenge. There is a level of safety assurance and reliability that is expected by both Police and the Fire Department for their respective operations and meeting that level could be challenging in the given climate. There is a potential risk of existing Class 1 alternatives based on zero-emissions not being able to meet the required level of safety assurance and reliability. Given the pace of evolution for zero-emission technologies, it is expected that the vehicle ranges will continue to increase along with better safety features and reliability. Therefore, any procurement of hybrid diesel electric and CNG vehicles poses a risk to the municipalities of getting "locked-in" into these transitional technologies for the duration of their operational lifetime or risk additional expenditure or value loss on prematurely replacing or selling the existing assets. The optimal solution for this class of vehicles would be a phased transition to zero-emissions, with the first phase starting in 2022 and continuing to 2030 focusing on the procurement of hybrid-electric variants. This will be followed by the procurement of battery electric variants in the next phase beginning in 2030. There are several commercial options in the market for zero-emission Class 1 vehicles which can be considered for general purpose alternative energy vehicles. There are exclusive zero-emission options catering to the requirements of Police in the form of battery electric police cruisers and these can be evaluated against the idling, safety assurance and reliability requirements of the Police.
Solutions	

6.1.3 Class 2 Propulsion Technologies (Light-duty pickup trucks)

The City's Class 2 fleet comprises of 73 light-duty pickup trucks that are currently used for medium- to heavy-duty applications. These light-duty pickups constitute approximately a quarter of the entire City fleet. While there have been commercial variants based on CNG and hybrid diesel/gas-electric technology available since the mid-2010s, the advent of battery-electric variants has been recent with a selection of models already on the market while many other battery-electric variants are currently in the pipeline. The hydrogen fuel cell Class 2 truck market is still developing.

The following sections identify various aspects associated with the transitioning of the existing fleet of Class 2 Light-Duty Pickup trucks to zero/lower-emission vehicles.

6.1.3.1 Utility & Infrastructure

Table 6.3: Future State Considerations for Class 2 Vehicles for Utility & Infrastructure Departments

Class 2 Propulsion Technologies (Light Duty Pick-up Truck)	Utility & Infrastructure
Opportunities	Since Type 2 Light-Duty Pickup Trucks are already commercially available in battery electric variants, there is potentially a direct pathway to zero-emissions. Similar facility modifications are required to safely accommodate CNG and hydrogen fuel-cell vehicles. This could lead to a pathway where CNG naturally transitions to hydrogen fuel-cell vehicles. the

	CNG and hybrid-battery electric variants are proven technology with several commercial options currently available. The procurement schedule has also identified several scheduled procurements for vehicles of this class all the way to 2030. This provides an opportunity to initiate the transition to zero emission sooner and at a faster pace.
Constraints	Vehicles in the Utility & Infrastructure fleets have various uses, such as ferrying tools and service crews or conducting auxiliary operations. The Utility & Infrastructure departments also manage night operations with its vehicles distributed across multiple depots. These night operations, long durations of operational deployment and distributed vehicle depots present additional complexities of reduced downtimes and the need to equip all depots with charging equipment and have mobile charging equipment. The vehicles have large idling requirements and need to be on standby resulting in smaller windows of opportunities for charging. Durability and extreme-weather operational capability were identified as critical necessities as inclement weather causes more demand and hours of operation. Since the vehicles do not return to the same location after the work has been completed, distributed fueling/charging operations will have to be considered. A particular constraint with procuring transitional technology vehicles is futureproofing as these vehicles are expected to be replaced by zero-emission vehicles.
Risks	The adequacy of the existing zero-emission light-duty pickup truck to support continuous day-long operations of the Utility & Infrastructure Department possess a great risk. Limited availability of zero-emission vehicles exclusively designed and built for utility-operations enhances the reliance on transitional technologies-based vehicles. Given the pace of evolution for zero-emission technologies, it is expected that the vehicle ranges will continue to increase along with better safety features and reliability. Therefore, any procurement of hybrid diesel electric and CNG vehicles poses a risk to the municipalities of getting "locked-in" to these transitional technologies for the duration of their operational lifetime or risk additional expenditure or value loss on prematurely replacing or selling the existing assets.
Solutions	The optimal solution for this class of vehicles would be a phased transition to zero-emissions, starting in 2022 and continuing to 2024, focusing on the procurement of hybrid-electric variants. This will be followed by the procurement of battery electric variants in the next phase 2025 onwards. It is recommended that the City also procures a few battery-electric vehicles in the first phase in order to train the workforce and adapt the vehicles to the operational requirements of the fleet. A possible solution could be the deployment of battery electric vehicles at more central locations with hybrid vehicles catering to the needs of peripheral areas. To address the challenges associated with the high up-time requirements, additional options that can be explored include acquiring assets such as energy storage enabled DC fast chargers and mobile chargers to ensure minimal operational disruption.

6.1.3.2 Public Works and Transportation

Table 6.4 Future State Considerations for Class 2 Vehicles for Public Works and Transportation departments

Class 2 Propulsion Technologies (Light Duty Pick-up Truck)	Public Works and Transportation
Opportunities	Since Class 2 Light-Duty Pickup Trucks are already commercially available in battery electric variants, there is potentially a direct pathway to zero-emissions. Once hydrogen Class 2 trucks are matured, Similar facility modifications are required to safely accommodate CNG and hydrogen fuel-cell vehicles. This could lead to a pathway where CNG naturally transitions to hydrogen fuel-cell vehicles. The CNG and hybrid-battery electric variants are matured technology with several commercial options currently available. The procurement schedule has also identified several scheduled procurements for vehicles of this class all the way to 2030. This provides an opportunity to initiate the transition to zero emission sooner and at a faster pace.
Constraints	Some of the identified constraints include high idling requirements and snow ploughing applications which are extremely demanding. Due to the high usage of the auxiliary equipment and hydraulic/electric powered attachments/accessories there is a significant power draw. Given the significant operational deployment of these vehicles, there might be a requirement for mobile charging systems. A particular constraint with procuring transitional technology vehicles is futureproofing as they are expected to be soon replaced by zero-emission vehicles.
Risks	While there have been multiple announcements of zero-emission Class 2 light duty pick-up trucks, most of them focus on personal use and trucks with high battery capacity that can cater to municipal applications are still rare. This raises potential questions about the adaptability of these Class 2 trucks for municipal applications and constitutes a significant risk. High levels of operational deployments also result in narrower windows for charging. This results in the risk of the vehicle becoming stranded or having to return from the operational site for charging.
Solutions	Given the constraints of high operational readiness, limited downtime, long hours of deployment and distributed housing of vehicles, it is recommended that the transition of the fleet to zero-emission vehicles is done in phases with the first phase focusing on the procurement of hybrid-electric variants starting 2022 onwards all the way to 2024. This will be followed by the procurement of battery electric variants in the next phase 2025 onwards. It is recommended that the City also procures a few battery-electric vehicles in the first phase in order to train the workforce and adapt the vehicles to the operational requirements of the fleet. To address the challenges associated with the high up-time requirements, additional options that can be explored include acquiring assets such as energy storage enabled DC fast chargers and mobile chargers to ensure minimal

	operational disruption.

6.1.3.3 Fire Department and Police

Table 6.5: Future State Considerations for Class 2 Vehicles for Fire Department and Police

Class 2 Propulsion Technologies (Light Duty Pick-up Truck)	Fire Department and Police
Opportunities	Since Class 2 Light-Duty Pickup Trucks are already commercially available in battery electric variants, there is potentially a direct pathway to zero-emissions. Once hydrogen Class 2 trucks are matured, the existing fuelling infrastructure can be used with certain modifications for hydrogen. The CNG and hybrid-battery electric variants are matured technology with several commercial options currently available. The procurement schedule has also identified several scheduled procurements for vehicles of this class all the way to 2030. This provides an opportunity to initiate the transition to zero emission sooner and at a faster pace. The procurement schedule has also identified several scheduled procurements for vehicles of this class all the way to 2030. This provides an opportunity to initiate the transition to zero emission sooner and at a faster pace.
Constraints	Some of the identified constraints include high idling requirements by the vehicles and long operational deployment which is extremely demanding. Since these vehicles serve as mobile offices, there is a need for large internal volume and ergonomic design to ensure comfort of the staff. To incorporate specific policing related requirements, non-propulsion aspects related to vehicle strength such as chassis strength need to be tested. Due to the high auxiliary usage, there is a significant power draw by other vehicle accessories. Given significant operational deployment of these vehicles, there might be a requirement for mobile charging systems. A particular constraint with procuring transitional technology vehicles is futureproofing as they are expected to be soon replaced by zero-emission vehicles.
Risks	While there have been multiple announcements of zero-emission Class 2 light duty pick-up trucks, most of them focus on personal use and trucks with high battery capacity that can cater to municipal applications are still rare. This raises potential questions about the adaptability of these Class 2 trucks for municipal applications and constitutes a significant risk. Long operational deployments also result in narrower windows for charging. This results in the risk of the vehicle becoming stranded or having to return from the operational site for charging. In addition, the more ubiquitous low- and zero-emissions Class 2 Light-Duty Pickup Trucks might not be able to adhere to the security and protective measures that might be needed for Fire and Police Departments. This results in the risk of the vehicle becoming stranded or having to return from the operational site for charging.
Solutions	Given the constraints of high operational readiness, limited downtime, long

	hours of deployment and distributed housing of vehicles, it is recommended that the transition of the fleet to zero-emission vehicles is done in phases with the first phase focusing on the procurement of hybrid-electric variants starting 2022 onwards all the way to 2024. The initial transition to hybrid-electric vehicles is recommended given the already existing familiarity of the Police department with such vehicles with the final transition to zero-emission vehicles in the latter phase. Given the long operational deployment and quick turnaround needs, mobile chargers can be explored for battery-electric vehicles to be deployed at the sites to sustain operations without the need to return to base. A phased transition is recommended given that the existing zero-emission variants might not be able to meet high operational requirements for the Police and Fire Departments.

6.1.4 Class 3,4 & 5 Propulsion Technologies (Heavy Duty Pickup Trucks)

The City of Saint John's existing fleet comprises of 39 vehicles of Classes 3-5 heavy duty pickup trucks split across all user groups. These vehicles are currently used for medium- to heavy-duty applications and constitute approximately 20% of the City's fleet. While there have been commercial variants based on CNG and hybrid diesel/gas-electric technology available since the mid-2010s, the advent of battery-electric variants has been recent with some battery-electric models currently in the developmental pipeline and expected to debut this year. There are some hydrogen fuel cell vehicles currently under development, but no hydrogen fuel cell-based variant is currently commercially available.

Most of these trucks are engaged in medium-to heavy duty vehicle operations and do not have any unique department-specific functionality requirement, and the following analysis is relevant to all user groups for this class of vehicles.

Table 6.6: Future State Considerations for Class 3,4 & 5 Vehicles for all City Departments

Class 3, 4 & 5 Propulsion Technologies (Heavy Duty Pickup Trucks)	All City Departments
Opportunities	Plug-in hybrid and CNG variants of these vehicles are currently commercially available with battery-electric variants being currently in the developmental pipeline. Given that this vehicle class is subjected to medium-to-heavy loads which can be borne by upcoming battery-electric variants, this presents an opportunity to significantly reduce the GHG emission footprint by transitioning the existing fleet to upcoming zero-emission variant. The procurement schedule has also identified several scheduled procurements for vehicles of this class all the way to 2030. City of Saint John has already achieved considerable decline in their GHG emission levels from 2005 which provides the flexibility in terms of timeline for making the transition to zero-emission vehicles.

Constraints	There are no existing battery electric or hydrogen variants of the Class 3-5 vehicles currently commercially available in North America, although some battery-electric variants are currently in the pipeline. The lack of municipal deployments of vehicles of this class across Canada was identified as a key constraint along with the concerns of the existing variants meeting the operational requirements. For some of the vehicles of this class, long operational deployment of around 15-20 hours presents a significant challenge for any alternative technology with limited downtimes. A particular constraint with procuring transitional technology vehicles is futureproofing as they are expected to be soon replaced by zero-emission vehicles.
Risks	Given the nascent stage of the battery-electric and hybrid-electric variants of these vehicles, there is a risk of supply chain and spares availability. The severe operational deployment contributes to the prominent risk of vehicles being unable to find sufficient time for charging or poses of financial risk of needing fast charging equipment. Given the high capital costs for these vehicles, there is a significant concern of never being able to achieve break even for these trucks. Given that there are several zero-emission variants currently under development, any procurement of transitional technologies will lead to the City being "locked-in" to these vehicles for the duration of their operational life or incur financial loss by retiring the vehicle earlier.
Solutions	It is recommended to have a phased approach towards the replacement of the vehicles in this class with the initial phase involving the continued use of existing greenhouse gas technologies until 2030. The second phase of this transition will involve the replacement of these greenhouse gas technology vehicles with zero-emission variants which are expected to be commercially available and technologically mature by that point. It is expected that the vehicles of lower classes can be transitioned to zero-emission variants earlier than this class. This timeline will ensure that the City is also able to learn more from the experience of other municipalities that had successfully navigated towards a zero-emission fleet comprising vehicles of this class.

6.1.5 Class 6, 7 & 8 Propulsion Technologies (Heavy-Duty Truck Platforms)

The City of Saint John's fleet comprises of 32, Class 6-8 heavy duty truck platforms distributed across various user groups. These vehicles are currently used for heavy-duty applications and constitute approximately 13% of the City's fleet. While there have been commercial variants based on CNG and hybrid diesel/gas-electric technology available since the mid-2010s, the advent of battery-electric variants has been recent with many battery-electric and some hydrogen fuel cell variants being currently in the development pipeline of various OEMs.

Given that there are limited commercially available options for zero-emission vehicles in this category, the following analysis is relevant to all the departments for this class of vehicles.

Table 6.7: Future State Considerations for Class 6,7 & 8 Vehicles for all City Departments

Class 6, 7 & 8 Propulsion	All City Departments

Technologies (Heavy-Duty Truck Platform)	
Opportunities	Plug-in hybrid and CNG variants of these vehicles are currently commercially available with battery-electric variants being currently in the developmental pipeline while hydrogen fuel cell-based vehicles still in a nascent stage. This presents an opportunity to significantly reduce the GHG emission footprint by transitioning the existing fleet to the available low-emission variants. The procurement schedule has also identified several scheduled procurements for vehicles of this class from 2024 onwards, which will be an opportunity to initiate this transition early and thus enable a faster GHG emissions decline. The City has already achieved a considerable reduction in their GHG emission levels from 2015 which provides the flexibility in terms of timeline for making the transition to zero-emission vehicles.
Constraints	Currently there are no existing battery electric or hydrogen variants of the Class 6-8 vehicles commercially available in North America, although some battery-electric variants are currently in the pipeline. The lack of municipal deployments of vehicles of this class across Canada was identified as a key constraint along with the concerns of the existing variants meeting the operational requirements. Long operational deployment of around 20 hours for heavy duty trucks presents a significant challenge for any alternative technology. The downtime windows, that can be availed for charging, are of limited durations (30 minutes). A particular constraint with procuring transitional technology vehicles is futureproofing as they are expected to be soon replaced by zero-emission vehicles.
Risks	Given the developmental stage of the battery-electric and nascent stage of hydrogen-fuel cell variants of these vehicles, there is a risk of supply chain and spares availability. The severe operational deployment contributes to the prominent risk of vehicles being unable to find sufficient time for charging or poses significant financial risk of needing fast charging equipment. Given the high capital costs for these vehicles, there is a significant concern of never being able to achieve break even for these trucks. Hybrid electric vehicles and CNG vehicles are currently commercially available but will continue to have a carbon footprint. This continued carbon footprint may lead to financial burden when the carbon tax comes into effect. Given that there are several zero-emission variants currently under development, any procurement of transitional technologies (CNG, hybrid electric) will lead to the City being "locked-in" to these vehicles for the duration of their operational life or incur financial loss by retiring the vehicle earlier.
Solutions	The challenges associated with heavy duty operational requirements, limited spare vehicles due to high capital costs for replacement, the lack of commercially available zero emission variants, and the potential risk of being "locked" in transitional technologies present a considerable barrier. Given that the City is well on track to achieve its emission reduction goals, a phased approach towards vehicle replacement is recommended. The first phase of this approach will involve continuing with the existing GHG based

	conventional propulsion-based vehicles for heavy operational use with gradual induction of CNG vehicles for relatively lesser operational requirements and for getting staff to get hands-on training. The subsequent phase will initiate with the next round of procurement and will involve the procurement of zero-emission technology variants as it is expected that the zero-emission variants will be commercially available by them. This solution fits well with the scheduled procurements 2024 onwards. It is expected that the vehicles of lower classes can be transitioned to zero-emission variants earlier than this class. There is also a need to learn more from the experience of other municipalities that have successfully navigated towards a low/zero-emission fleet in managing the transition of vehicles of this class.

6.1.6 Class 7 Propulsion Technologies (Streetsweepers)

The fleet of 2, Class 7, street sweepers used by the Public Works Department for the sweeping and cleaning of the City's roadways are a critical component of the City's fleet. The cleaning operations are heavy duty as these streetsweepers can collect tonnes of dust per minute and, therefore, these vehicles have significant auxiliary power requirements.

The following table presents an analysis of the transition dynamics associated with these streetsweepers.

Table 6.8: Future State Considerations for Class 7 Vehicles (Streetsweepers)

Class 7 Propulsion Technologies (Streetsweeper)	Public Works Department
Opportunities	Streetsweeper form a critical component of any municipal fleet. Given the nature of operations of these vehicles, they have extensive auxiliary energy requirements and therefore, transitioning them to zero- and lower-emissions variants will result in significant carbon footprint decline. Battery electric, plug-in hybrid and CNG variants of streetsweepers are currently in the advanced stage of development with commercial availability expected to occur by 2022. The hydrogen fuel cell-based streetsweeper is still under development. City of Saint John has already achieved considerable decline in their GHG emission levels from 2015 which provides the flexibility in terms of timeline for making the transition to zero-emission vehicles.
Constraints	The heavy-duty operational and auxiliary energy requirements of the streetsweeper will put forward reliability challenges for zero-emission technologies especially the battery electric and plug-in hybrid variants. The lack of earlier municipal deployment presents another barrier of lack of municipal familiarity with the operation. High financial costs will present themselves as a constraint to acquiring multiple vehicles as backups. A particular constraint with procuring transitional technology vehicles is futureproofing as they are expected to be soon replaced by zero-emission vehicles. The next rounds of replacements are scheduled to happen this year in 2022 and 2029. The key risk with the zero-emission variants is with respect to reliability issues in supporting heavy-duty operation and the associated high costs.

Risks	The high costs create a financial risk in terms of procuring the vehicles (inclusive of replacements) with unverified operational capabilities. Given that the zero-emission variants are expected to be commercially available soon, the procurement of transitional technologies will lead to the City being "locked-in" to use transitional technology vehicles till the end of their operational life or incur financial loss by retiring the vehicles earlier.
Solutions	The challenges associated with heavy duty operational requirements, high financial burden due to high capital costs, the lack of commercially available variants and the potential risk of being "locked" in transitional technologies present a considerable barrier for streetsweeper fleet transition. Given that the City is well on track to achieve its emission reduction goals, a phased approach towards vehicle replacement is recommended. The first phase of this approach will involve continuing with the existing GHG based conventional propulsion-based vehicles for heavy operational use up until 2024. This will be followed by induction of batter electric variant in the subsequent phase 2025 onwards as it is expected that the zero-emission variants will be commercially available by then at a lower price. There is also a need to learn more from the experience of other municipalities that have successfully navigated towards a low/zero-emission fleet in managing the transition of vehicles of this class.

6.1.7 Class 8 Propulsion Technologies (Refuse Truck)

Refuse Trucks form a significant portion of any City's fleet. They are characterized by frequent start-stop operations which results in heavy duty power and energy requirements. There are transitional technology variants (CNG, and hybrid-electric) currently commercially available with battery-electric vehicles currently in the pipeline and expected to arrive in 2022.

As the Refuse Trucks are used by the Public Works Department for the purpose of solid waste collection the following analysis is catered to this user group.

Table 6.9: Future State Analysis of Class 8 Vehicles (Refuse Trucks)

Class 7 Propulsion Technologies (Refuse Truck)	Public Works Department
Opportunities	Given the operating attributes of refuse trucks (high power and energy requirements, low average speed, low mileage, frequent start-stops), converting these vehicles to zero-emissions will result in extensive carbon emission reduction. This vehicle group has a variety of commercially available transitional technologies, including both battery electric and hydrogen fuel-cell variants. currently in development. The City has already achieved a considerable decline in their GHG emission levels from 2015 which provides the flexibility in terms of timeline for making the transition to zero-emission vehicles.

Constraints	The heavy-duty operational requirements of the Refuse Trucks will pose power draw challenges for zero-emission technologies especially the battery electric variants. This will require the need for higher battery capacity which will add weight. A particular constraint with procuring transitional technology vehicles is futureproofing as they are expected to be soon replaced by zero-emission vehicles. Current equipment has been recently procured and replacements are scheduled out to 2040.
Risks	Given the heavy-duty operational requirements of the Refuse Trucks, any failure in supporting the operations will have severe impact. Relatively high procurement costs for the Refuse Trucks also restricts municipalities from having high spare ratios. Given that the zero-emission variants are expected to be commercially available soon, the procurement of transitional technologies will lead to the City being "locked-in" to use transitional technology vehicles till the end of their operational life or incur financial loss by retiring the vehicles earlier.
Solutions	The challenges associated with heavy duty operational requirements, limited spare vehicles due to high capital costs, the lack of commercially available variants and the potential risk of being "locked" in transitional technologies present a considerable barrier. Given that the City is well on track to achieve its emission reduction goals, it is recommended to continue with the existing GHG based conventional propulsion-based systems until the next round of procurement is due. It is expected that the zero-emission variants will be commercially available by then.

6.1.8 Class 8 Propulsion Technologies (Pumper Fire Truck)

The Pumper Fire Truck group consist of pumpers, ladders, and tanker trucks, which are used by the Fire Department at the City. The Fire trucks can be required to deploy at sites for long durations and have extensive auxiliary energy requirements to support ongoing operations.

Table 6.10: Future State Considerations for Class 8 Vehicles (Pumper Fire Truck)

Class 8 Propulsion Technologies (Pumper Fire Truck)	Fire and Police Departments
Opportunities	Pumper Fire Trucks form a small yet essential component of a City's fire fleet. Given the size of these vehicles, they have extensive energy requirements and therefore, transitioning them to zero- and lower-emissions variants will result in significant carbon footprint decline. Battery electric and plug-in hybrid variants of electric pumper truck are currently in the advanced stage of development with several municipal orders lined up at the manufacturers. The hydrogen fuel cell-based pumper trucks are still under development. The CNG variants have been commercially available since 2019. The City has already achieved a considerable decline in their GHG emission levels from 2015 which provides the flexibility in terms of timeline for making the transition to zero-emission vehicles.

Constraints	The heavy-duty operational and auxiliary energy requirements of the Pumper Fire Trucks will put forward reliability challenges for zero-emission technologies especially the battery electric variants. This will require the need for higher battery capacity which will add weight. A particular constraint with procuring transitional technology vehicles is futureproofing as they are expected to be soon replaced by zero-emission vehicles. Current equipment has been recently procured and the next round of replacements are scheduled out to 2040.
Risks	The key risk with the zero-emission variants is with respect to reliability issues in supporting heavy-duty operation and the associated high costs. The high costs create a financial risk in terms of procuring the vehicles (inclusive of replacements) with limited operational capabilities. Given that the zero-emission variants are expected to be commercially available soon, the procurement of transitional technologies will lead to the City being "locked-in" to use transitional technology vehicles till the end of their operational life or incur financial loss by retiring the vehicles earlier.
Solutions	The challenges associated with heavy duty operational requirements, high financial burden due to high capital costs, the need for replacement vehicles to add resiliency against operational limitations, the lack of commercially available variants and the potential risk of being "locked" in transitional technologies present a considerable barrier for pumper fleet transition. Given that the City is well on track to achieve its emission reduction goals, a phased approach towards vehicle replacement is recommended. The first phase of this approach will involve continuing with the existing GHG based conventional propulsion-based vehicles for heavy operational use up until 2030. This will be followed by gradual induction of zero-emission vehicles in the subsequent phase in the next round of procurement as it is expected that the zero-emission variants will be commercially available by then at a lower price. There is also a need to learn more from the experience of other municipalities that have successfully navigated towards a low/zero-emission fleet in managing the transition of vehicles of this class.

6.2 Future State Considerations- Transit Vehicles

6.2.1 Transit Propulsion Technologies

Saint John Transit has a mixed fleet of 47 diesel and gasoline transit buses. Transit buses have a heavy operational duty cycle due to the frequent start-stops, kneeling and raising, and opening & closing of the entrance and exit doors. All of which will result in additional energy draws. Based on these operational characteristics and the available alternatives, highlighted in Section 4, the following analysis highlights the key aspects associated with the transition of the 28-foot and 40-foot buses.

Table 6.11: Future State Considerations for Public Transit Buses

Transit Propulsion Technologies (35-40 foot)	Saint John Transit

Opportunities	Public transit fleets serve a critical requirement of providing mobility services with a significant focus on the social equity aspect. There have been several deployments of zero-emission buses across different jurisdictions across the world. Given, the high operational requirements of the public transit fleet and high energy requirements, transitioning this fleet to zero-emission variants provides the greatest benefit in terms of emission reduction. Zero-emission bus variants have reduced operational costs due to the lower cost of energy compared to diesel fuel, along with reduced maintenance requirements because of lesser moving parts which equates to an overall reduction in the lifecycle cost of the zero-emission buses. Based on the existing procurement schedule, 4-5 transit buses are expected to be added to the fleet each year, thus providing an opportunity to initiate this transition early on. There are other transitional technologies currently available in market such as plug-in hybrid and CNG at lower capital costs. Other options include hydrogen fuel cell buses which are more expensive than battery electric buses but have the advantage of operational ranges that exceed performance values of existing diesel technologies. While the zero-emission buses are presently expensive, the battery costs are experiencing a fast decline and there is more government funding and financing available to support the transition of the public transit buses to zero-emission alternatives.
Constraints	Zero-emission buses have significantly higher capital costs as compared to the conventional diesel buses leading to a substantial upfront financial burden on the municipal agency. In addition, shifting to battery electric buses will require a complete shift in the energy and power infrastructure. This will present itself as an additional financial burden on the City. In addition, the deployment of these new battery electric buses is greatly dependent on the battery capacity, and charger size and location which are additional variables for the City to consider and ultimately manage. Given that the zero-emission buses are available the procurement of transitional technologies will lead to the City being "locked-in" to use transitional technology vehicles until the end of their operational life or incur financial loss by retiring the vehicles earlier.
Risks	The biggest risk associated with transitioning the existing greenhouse technology based transit fleet to a zero-emission fleet is the financial cost and complexity of shifting the entire transportation-energy matrix from the existing diesel and natural gas systems, and supply chain to an electric or hydrogen one. Additional risks include inadequate planning resulting in non-optimal distribution of charging/refuelling locations and non-optimal deployment of the buses. This could result in a failure in route completion, high utility bills and unexpected utility infrastructure modification requirements. Given that the zero-emission variants are commercially available, the procurement of transitional technologies will lead to the City being "locked-in" to use transitional technology vehicles till the end of their operational life or incur financial loss by retiring the vehicles earlier.
Solutions	In comparison among the zero-emission bus alternatives, battery electric buses are found to have an advantage of lower capital costs along with a

	more reliable and lower energy supply costs. Battery electric buses have also undergone multiple deployments across Canada and there are currently ongoing funding and financing programs from the Government of Canada that partially offsets the cost associated with these buses and charging solutions. Given that the local utility Saint John Energy and power generator NB Power are working to reduce the carbon intensity of the grid to zero by 2035, it presents as the most suited solution where multiple local partners can engage in the planning and deployment of the chargers and the buses. Early utility consultation and engagement will also lead to new business models that might have utility playing an active role in maintaining and installing the chargers.

6.3 Electrical Utility Consultations

The Province of New Brunswick has NB Power as its vertically integrated utility provider that covers all aspects of generation and transmission. On the distribution end, NB Power supplies power to residential and industrial units across all jurisdictions except Saint John, Edmundston, and Perth-Andover, each of which being served by local electrical utilities. The utility provider responsible for the power distribution in Saint John is Saint John Energy. Multiple rounds of consultation were conducted with Saint John Energy to develop this section.

Table 6.12: Future State Consideration for Electrical Utility

	Electrical Utility Consultations
Opportunities	The Government of Canada has identified 2050 to be the deadline for achieving decarbonization. However, there are indications from the federal government and industry that suggest that a more ambitious target may be mandated soon. Recently, Environment and Climate Change Canada has initiated a consultation process to achieve a net-zero emission grid by 2035. Both NB Power and Saint John Energy are working towards identifying cleaner alternatives as the Belledune facility, that produces 18% of New Brunswick's electricity is expected to be closed by 2030. Apart from renewable energy options, such as solar and wind, that are being explored, NB Power is also exploring Small Modular Reactor (SMR) technology. A number of renewable energy projects have been identified in the province and are set to become operational by 2030. Additional benefits in partnering with the local utility include joint procurement and management of utility-sized batteries that can assist in peak-shaving, demand management and two-way energy flow. This will also assist in installing resiliency measures in the community along with cost sharing and lesser burden on the respective organizations. An additional benefit could be the establishment of a business model in which installation and maintenance (preventative and corrective) of charging stations can be managed by the local utility.

Constraints	Currently, the grid in New Brunswick, comparatively, has a higher footprint than the Canadian average. This essentially means that even with zero-tailpipe emission technologies like battery electric and fuel cell variants, there will still be a carbon footprint associated which might be a barrier to achieve net carbon zero goal. The consultation process to achieve a clean, net-zero grid has only recently been initiated and the conclusion of the process along with and timeline is not guaranteed. Another potential constraint from the utility side could be the capacity of existing utility infrastructure to meet the requirements for charging in the case of electric vehicle or plug-in hybrid vehicles.
Risks	The grid carbon intensity remains a key risk factor that can impact the net-zero target by 2040. Given that the consultation process among the stakeholders has been initiated by the Federal Government, the process to address this risk has begun. The utilities in New Brunswick are considering various renewable and other options (including SMR) as alternatives to existing coal-based stations in the province. There exists a risk in having the required suitable renewable energy and non-carbon-based replacements before 2030. There is a financial risk of low uptake of electric vehicles or plug-in hybrid vehicles after investing in the upgradation of the grid although this risk is small as the Federal Government has established deadlines for making the transition.
Solutions	The drive towards electrification at the Federal level and for the purpose of this study, 2035 will be considered as the grid decarbonization deadline based on the received inputs from the City and the utility providers. Based on the guidance provided by Saint John Energy, emission values of 270 grams of CO_2e per kWh will be adopted in the methodology. Given these targets, the GFP will assume a linear decarbonization of the electrical grid from the existing levels achieving zero-emissions by 2035. A methodology can be identified in terms of identifying the trigger points that require the utility infrastructure expansion. EV friendly charging policies are recommended to be pursued by the City with Saint John Energy for lower rates for overnight charging and lower demand charges to benefit infrastructure scaling.

6.4 Hydrogen Provider Consultations

Two locally based gas utilities – Charbone and Liberties – were consulted with respect to the current and future availability of Hydrogen in Saint John. In addition, discussions were also carried with the Port of Saint John to discuss potential upcoming anchor loads in the region to ensure faster scale up to achieve feasibility. The price of hydrogen was provided by two Gas Utilities, Liberties and Charbone. Notably, the price of green hydrogen is expected to be much higher in the short term and is only expected to reach the anticipated price of $8 per kg using large scale production methods and access to cheap energy. Charbone estimated the unit price of hydrogen to be closer to $12 per kg early in the adoption. The uncertainty in price will pose a risk to the City should a hydrogen strategy be selected, though industry partnerships may be available to mitigate exposure to high prices.

Table 6.13: Future State Consideration for Hydrogen Utility

Gas Utility Consultations about Hydrogen	
Opportunities	Hydrogen provides a zero-emission alternative to existing fuels and a potential advantage better meeting range constraint. Similar facility modifications are required to safely accommodate CNG and hydrogen fuel-cell vehicles. This could lead to a pathway where CNG naturally transitions to hydrogen fuel-cell vehicles. Hydrogen refuelling can be completed in minutes just like the gas/diesel refuelling process. The scaling up of hydrogen fuel utilization is much easier on the infrastructure part when compared to battery electric vehicles. Both Charbone and Liberty have highlighted their plans to develop green hydrogen. There is a project currently under-development in Quebec that will be able to produce up to 200 kgs/day within next 18 months and will be scaled up thereafter. The availability of other potential hydrogen consumers in the region especially in the Atlantic Hydrogen Alliance provides an opportunity for hydrogen exports, thus establishing anchor loads to ensure scaling up to achieve feasibility. A large-scale hydrogen adoption by the City could potentially lead to hydrogen producers exploring to lease land within the city to establish hydrogen production centres which can create additional revenue opportunities and long-term hydrogen availability, thus easing any hydrogen supply chain anxieties leading to community-wide hydrogen uptake in the future.
Constraints	Hydrogen costs are the biggest constraint. At present, the hydrogen delivery cost has been identified to be $16/kg and is expected to range in the future between $8-$12/kg with $8/kg being the optimistic case and $12/kg expected to be a more reasonable cost. Hydrogen vehicles in general are more expensive than battery electric vehicles. Another constraint for the hydrogen technology is that the hydrogen refueling stations are more centrally located and the vehicles might have to travel significant distances for refueling.
Risks	The hydrogen fuel pricing presents the greatest risk as it significantly depends upon the production scale and thus relies massively on the anchor loads and consumption uptake. A 50% difference in the hydrogen costs per kg between the optimistic and reasonable scenarios presents a significant financial risk for the City. For this study, the optimistic assumption of hydrogen cost of $8/kg is compared against the conservative estimates of the BEV scenario. While evaluating the findings of this study, it needs to be considered that all hydrogen related outputs are based on the optimistic assumption of hydrogen prices.
Solutions	For the purpose of this study, the optimistic assumption of hydrogen cost of $8/kg is incorporated in the belief that future investments in hydrogen production will be made through cooperation with Atlantic Hydrogen Alliance.

7.0 Green Fleet Plan

7.1 Purpose of Green Fleet Plan

In the context of the City's Low-Carbon Migration Strategy, the Green Fleet Plan (GFP) considers a series of potential scenarios for the City Fleets to transition to green alternatives. These scenarios forecast the capital expenditures (CAPEX), operational expenditures (OPEX), and environmental impacts of operating different fleet mixes. The City will inform its decision of which technologies it wishes to pursue using these key performance metrics. After combining these findings with non-quantitative opportunities and risks, the recommended green fleet scenario will be used by the City to create a roadmap outlining the Low-Carbon Migration Strategy pathway. A roadmap for which the City will develop a detailed implementation plan and financial budgeting strategy.

The goal of the Green Fleet Plan is to serve as a like-for-like comparison of the different fleet technologies for informing the direction of the City's Low-Carbon Migration Strategy.

The GFP was created such that all scenarios satisfied the City's zero-emission sustainability goals. The two (2) applicable targets are a commitment to reducing City emissions 30% below 2015 levels by 2025, followed by achieving carbon neutrality by 2040. As indicated in the current state section of this report, the 2025 goal has already been met for City's transportation assets. Without a significant increase in fleet size or service miles. neither of which is currently planned by the City, no additional action was required by the GFP to meet this requirement (such as the early retirement of existing fleet assets or the incorporation of renewable fuels). Therefore, the 2040 target for carbon neutrality was the required target that all GFP scenarios had to satisfy.

To serve as a quantitative comparison between various implementations of fleet alternatives, the GFP aimed to provide the following information:

- Show the magnitude of investment required for each scenario.
- Show the operating costs associated with each scenario.
- Show the scale and rate of decarbonization with each scenario.
- Compare overall results to determine the best performing scenario.

7.1.1 Inclusions and Exclusions of the Green Fleet Plan

The GFP focused on on-road transportation assets that made up the active portion of the City's fleet. This included the eight (8) public fleet vehicle groups defined Section 4.2.2.

Table 7.1 GFP Public Fleet Vehicle Groups

Vehicle Group #	Public Vehicle Group Name
1	Class 1 – General Purpose
2	Class 1 – Police Cruiser
3	Class 2 – Light Duty Pickup Truck
4	Class 3, 4, & 5 – Heavy Duty Pickup Truck
5	Class 6, 7, & 8 – Heavy Duty Truck Platform
6	Class 7 – Streetsweeper

7	Class 8 – Pumper Fire truck
8	Class 8 – Refuse Truck

Two groups of transit fleet Vehicles were included in the GFP based on Saint John Transit's active fleet, which are listed below. Please note that the current transit fleet roster also includes 60' articulated joint buses, which would normally require an additional vehicle group, however these assets are not active and are planned for retirement without renewal.

Table 7.2 GFP Transit Fleet Vehicle Groups

Vehicle Group #	Transit Vehicle Group Name
9	40' Conventional Transit Bus
10	28' Specialized Transit Bus

The transportation assets that were not included in the GFP are presented in the figure below. Generally, excluded assets were either not on-road assets, such as tools, equipment, and generators. The excluded on-road assets were historic/museum vehicles that are not used to deliver City services and not planned for renewal. Similarly, other exclusions included hyper-specialized assets, such as an armoured vehicle that was received as a gift. These vehicles do not see regular service and are not planned for renewal.

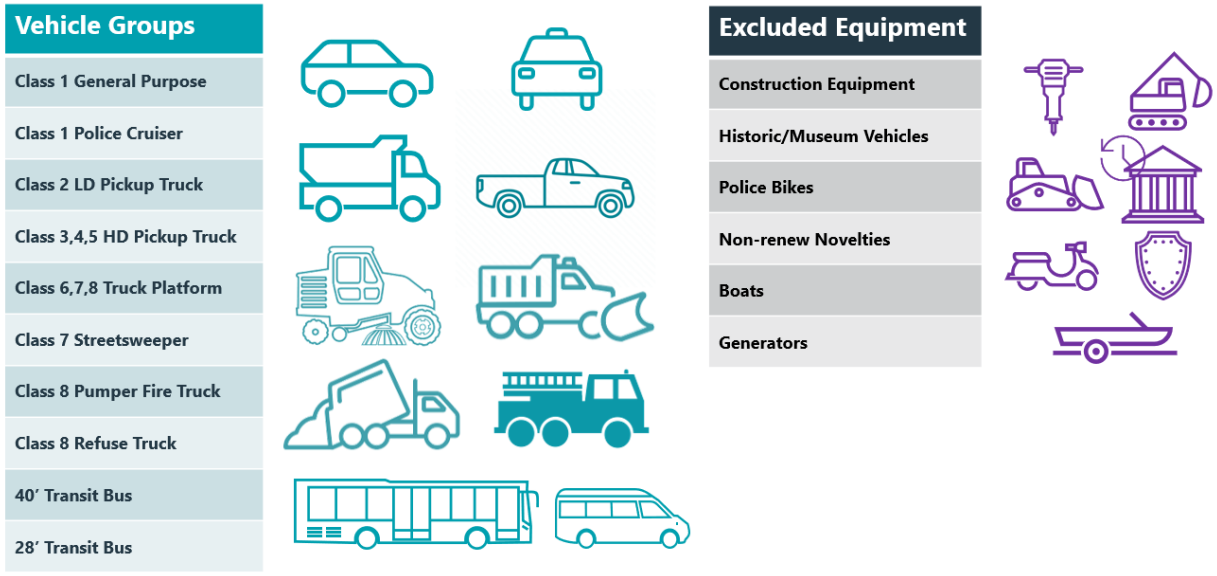


Figure 8 GFP: Included and Excluded Vehicles and Equipment

Figure 9 presents the proportion of the emissions produced in 2021 by assets included and exclude in the GFP. It is important to note that the capital costs, operational costs, and environmental impacts listed in the GFP does not include the excluded assets. Ultimately, transitioning the excluded assets to zero-emission alternatives will be necessary for the City to meet its environmental target of zero emissions by 2040. Plans for when and how to address these excluded assets will be included as part of the Low-Carbon Migration Strategy roadmap and implementation plan.

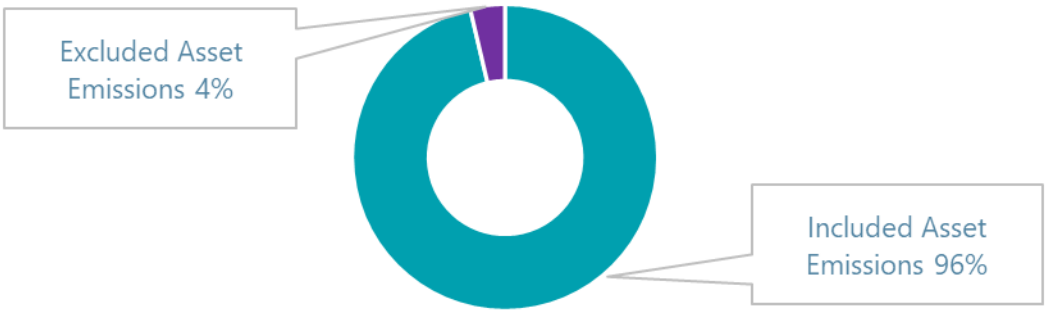


Figure 9 GFP: Proportions of Emissions between Included and Excluded Vehicles and Equipment

7.1.2 Comparative Scenarios of the GFP

7.1.2.1 Scenario 1: Business-as-Usual (BAU)

When comparing the performance of various fleet technologies, it can be helpful to present results in terms of the City's current operations. For this reason, Scenario 1 in the GFP is the BAU which models the continued procurement of GHG (diesel and gasoline) technologies. This means that each time a vehicle is retired at the end of its useful life, it will be replaced like-for-like with the existing GHG technology. No fleet expansions are anticipated up to 2040, meaning that all fleet purchases are limited to renewals. The capital and operating costs as well as the emissions will remain static, with the exception of increasing carbon tax and the impact of financial analysis factors (inflation and discount rates).

7.1.2.2 GFP Green Scenarios (2, 3, and 4)

The BAU scenario was compared with three (3) green fleet Scenarios (#2, #3, and #4). Each of the green scenarios modelled a different technology path for the City to reach its zero-emission goals. The primary mechanism for each transition is to replace vehicles with available technologies as they naturally reach the end of their expected useful lives. Early in the transition plan, replacements will be served with the current GHG (diesel or gasoline) technologies unless an effective hybrid vehicle is available. As the green technologies mature, it is expected that future replacements will involve procuring alternative technologies dependent on the scenario being modelled.

In the first green scenario, Scenario 2 – BEV, battery electric vehicles will be the primary technology used to reach zero emissions. The primary fuel used will be energy purchased from Saint John Energy and will require the deployment of significant EV charging equipment and expansions to the electrical infrastructure.

In Scenario 3 – FCEV, hydrogen fuel-cell vehicles will be the primary technology used to reach the zero-emission goal. The primary fuel used will be hydrogen purchased from a private gas utility (or utilities) and will require the deployment of a hydrogen refuelling station at the City's depot. The hydrogen fuelling partner(s) will deliver green hydrogen to site such that no emissions are attributed to City operations. Additionally, the depot will need significant modifications to safely accommodate the hydrogen vehicles.

Scenario 4 – CNG to BEV involves a deployment of CNG vehicles for the Class 6, 7, and 8 Truck Platform vehicle group. This vehicle group was identified for the opportunity as few green alternatives exist that can meet the service needs of the group, meaning that a CNG deployment may be worthwhile in lowering emissions and costs as green technologies are developed. This will involve the deployment of a CNG refuelling station and facility modifications to safely accommodate the CNG deployment. Ultimately the CNG vehicles need to be phased out and replaced with battery electric technologies to reach the City's

zero-emission goals. The remaining vehicle groups will transition to battery electric vehicles as planned in Scenario 2.

7.1.2.3 Green Public Fleet Procurment/Renewal Plan

In general, light duty vehicles will begin being replaced with hybrids (PHEV and HEV) until green vehicles (BEV or FCEV) begin implementation in 2023, 2025, and 2030. Streetsweepers and Refuse Trucks will continue to be replaced with GHG vehicles until 2025, when green technologies will begin being adopted. The remaining heavy-duty vehicles will continue to be replaced with GHG vehicles until 2030, at which point they will begin to be replaced with green alternatives. Notably in Scenario 4, the Class 6, 7, 8 Truck Platform vehicle group is expected to be replaced with CNG technologies beginning in 2024 up until 2030, at which point the vehicle group will begin to be replaced with green alternatives.

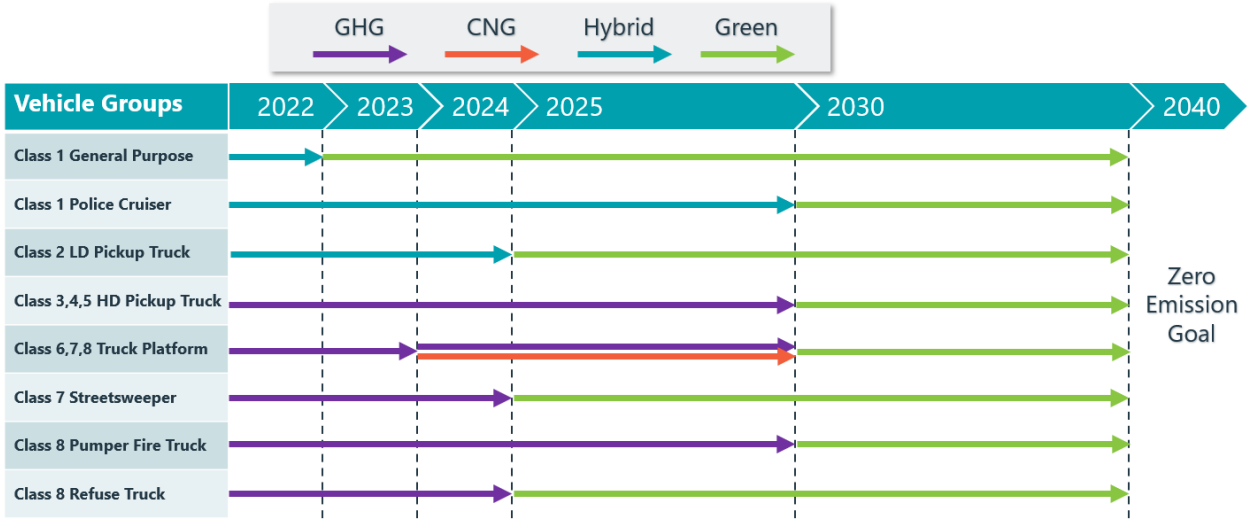


Figure 10 Expected Procurement Technology for the Public fleet

The expected useful life (EUL) of each vehicle group was developed collaboratively using historic replacement frequencies. This was supplemented with information regarding historic lifespans, identifying vehicles that were purchased "used" rather than "new". The City's expectation of future asset EUL was also incorporated in the final values used in the GFP. The final EUL values for each public fleet vehicle group are presented in Table 7.3.

Table 7.3 GFP Expected Useful Lives for Public Fleet Assets

Vehicle Group #	Public Vehicle Group Name	Expected Useful Life (Years)
1	Class 1 – General Purpose	10
2	Class 1 – Police Cruiser	6
3	Class 2 – Light Duty Pickup Truck	10
4	Class 3, 4, & 5 – Heavy Duty Pickup Truck	6
5	Class 6, 7, & 8 – Heavy Duty Truck Platform	10
6	Class 7 – Streetsweeper	12
7	Class 8 – Pumper Fire truck	10

8	Class 8 – Refuse Truck	13

No scenario in the GFP involves retiring assets before using them for the extent of their EUL. The timelines presented above refer to the points in time when the replacement technology will be applied to scheduled replacements. The planned procurements for the public fleet and resulting transition from GHG to Green technologies is graphically presented in Figure 11.



Figure 11 Public Fleet Procurements and Technology Mix

7.1.2.4 Green Transit Fleet Procurment/Renewal Plan

The GFP scenarios for Transit are more straightforward as Green alternatives exist that can be implemented in the short term. This means that Transit can transition its fleet into using battery-electric or hydrogen fuel-cell beginning with its next round of procurements, scheduled for 2023. To maintain the like-for-like comparison between the green technologies, the FCEV model predicts procuring hydrogen technologies for the 28′ Transit Buses. This is a risk as because unlike 40′ Transit Buses, FCEVs have yet to be launched commercially. This means that if the FCEV scenario was selected, some short-term adjustments to the City's procurement plan will be required to accommodate the launch of these vehicles.

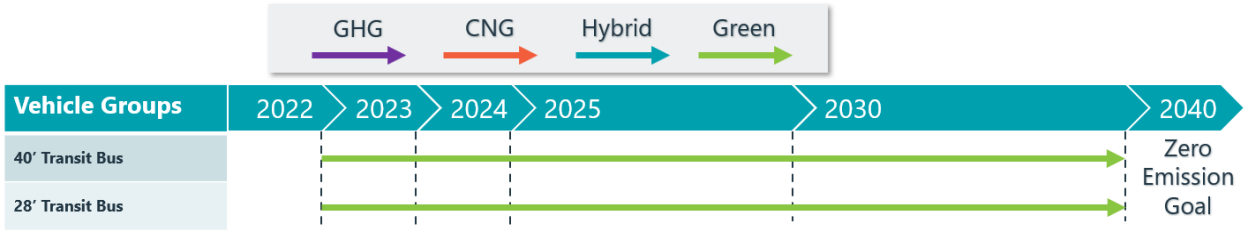


Figure 12 Expected Procurement Technology for the Transit Fleet

Similar to the public fleet assets, the expected useful lives of each transit vehicle group were developed collaboratively using the historic replacement frequencies of vehicles as a reference. This was supplemented based on the City's expectation of how future assets are expected to perform.

Table 7.4 GFP Expected Useful Lives for Public fleet Assets

Vehicle Group #	Public Vehicle Group Name	Expected Useful Life (Years)
9	40′ Conventional Transit Bus	12
10	28′ Specialized Transit Bus	8

The GFP modelled transit services as if they were to continue as they organised today, however it should

be acknowledged that alternative modes of delivery could be implemented between now and 2040. At the time of writing, Saint John Transit is evaluating new types of service that would allow it to downsize its fleet. Specifically, some regular service fixed routes may be transitioned to on-demand transit in the future, which may be better served by 28' Transit vehicles. The result is that some 40' buses may be renewed as 28' buses. No detailed transition has been developed as the feasibility study and pilot of the new on-demand service are on-going. For the GFP, the procurements will follow the existing rate of renewal under the assumption that no changes are made to transit service delivery (fleet size mix, annual mileage, fuel consumption).



Figure 13 Transit Fleet Procurements and Technology Mix

7.1.3 GFP Inputs and Assumptions

7.1.3.1 Financial Modelling Factors

The GFP model used the City of Saint John's standard inflation rate and discount factor. The inflation rate was applied to all scenarios to express values in real dollars, whereas the discount factor was reserved to net present value (NPV) calculations.

The Technology Discount Factor was an additional discount factor applied to the capital cost of procuring zero-emission technologies (BEV and FCEV). This rate was provided to de-escalate the cost of procuring zero-emission technologies as they're production techniques mature, competition between OEMs increases, and economies of scale are realized.

Table 7.5 GFP Financial Modelling Factors

Financial Input	Value
Inflation Rate	2.2%
Discount Factor	3.0%
Technology Discount Factor	2.5%

7.1.3.2 External Funding

The City of Saint John expects to access external funding resources to assist the procurement of green fleet assets. This funding could be provided from a variety of institutions and programs such as the federal government through the Canadian Infrastructure Bank (CIB) and the provincial government through the

Federation of Canadian Municipalities (FCM). These funds are modelled using the expected external funding contribution as a proportion of green vehicle capital costs procured during the time that these funds will be available. These expectations are listed for the Public Fleet and for the Transit Fleet in Table 7.6. Which funds the City should access for which deployments is a topic reserved for the implementation plan discussed in Section 8.0.

Table 7.6 GFP External Funding Factors

External Funding Input	Public Fleet Value	Transit Fleet Value
External Funding Proportion	15%	50%
External Funding Availability	2022-2030	2022-2027

7.1.3.3 Procurement Prices

The procurement prices for each vehicle group are an average of what a vehicle in that group will cost to replace once existing assets reach the end of their useful lives. Procurement prices for alternatively fuelled vehicles were sourced from the market scan findings and supplemented with direct OEM inquiries. Where no pricing information was available, similar cost ratios between similar alternative technologies and GHG prices were used to estimate procurement costs.

Table 7.7 GFP Procurement Prices

Vehicle Group Prices	GHG ($)	BEV ($)	FCEV ($)	Hybrid/CNG ($)
Class 1 General Purpose	28,000	38,198	62,750	35,682
Class 1 Police Cruiser	61,000	67,590	77,750	66,502
Class 2 LD Pickup Truck	55,000	68,000	81,600	55,000
Class 3,4,5 HD Pickup Truck	88,000	120,000	144,000	NA
Class 6,7,8 Truck Platform	425,000	633,000	735,600	510,000
Class 7 Streetsweeper	300,000	860,000	1,032,000	NA
Class 8 Pumper Fire Truck	675,000	2,125,000	2,550,000	NA
Class 8 Refuse Truck	330,000	1,000,000	1,200,000	396,000
Conventional Buses (35'-40')	550,000	1,000,000	1,250,000	NA
Specialized Buses (26'-30')	200,000	500,000	900,000	NA

7.1.3.4 Fuel Economy

The fuel economies for the GHG vehicles were compiled based on historic data from the City's fleet telematic system. Where fleet data was not available, fuel economies were generated using OEM specifications for similar vehicle classes. The same process was applied to alternative technologies that the City did not operate at time of writing. Some vehicle groups have yet to have commercial hydrogen fuel-cell product launches, in which case estimations were derived from other hydrogen vehicles of similar size.

Table 7.8 GFP Fuel Economy

Vehicle Group Prices	GHG ($)	BEV ($)	FCEV ($)	Hybrid/CNG ($)
Class 1 General Purpose	0.095	0.208	0.0087	0.220 (kWh/km)
Class 1 Police Cruiser	0.098	0.223	0.0087	0.098 (L/km)
Class 2 LD Pickup Truck	0.183	0.532	0.0250	0.064 (L/km)
Class 3,4,5 HD Pickup Truck	0.269	0.588	0.0250	NA
Class 6,7,8 Truck Platform	0.622	1.629	0.1000	0.250 (kg/km)
Class 7 Streetsweeper	0.385	1.643	0.1000	NA
Class 8 Pumper Fire Truck	0.713	1.629	0.1000	NA
Class 8 Refuse Truck	0.814	1.623	0.1250	0.250 (kg/km)
Conventional Buses (35'-40')	0.512	1.140	0.067	NA
Specialized Buses (26'-30')	0.305	0.800	0.035	NA

7.1.3.5 Maintenance Cost Expectations

The annual maintenance cost of the GHG vehicles were calculated using historical data for each vehicle group, this formed the baseline maintenance cost for GHG vehicles. Using maintenance cost savings expectations available from industry and academic reports, BEV and FCEV factors were produced to forecast costs in relation to the GHG baseline.

Table 7.9 GFP Annual Vehicle Maintenance Cost

Vehicle Group Annual Maintenance	GHG ($) (Baseline)	BEV Factor	BEV ($)	FCEV Factor	FCEV ($)
Class 1 General Purpose	1,274	60%	764	65%	828
Class 1 Police Cruiser	4,134	60%	2,481	65%	2,687
Class 2 LD Pickup Truck	3,365	60%	2,019	65%	2,187
Class 3,4,5 HD Pickup Truck	6,488	60%	3,893	65%	4,217
Class 6,7,8 Truck Platform	20,486	70%	14,340	75%	15,364
Class 7 Streetsweeper	33,969	70%	23,779	75%	25,477
Class 8 Pumper Fire Truck	14,573	70%	10,201	75%	10,930
Class 8 Refuse Truck	23,206	70%	16,244	75%	17,404
Conventional Buses (35'-40')	29,298	75%	21,974	75%	21,974
Specialized Buses (26'-30')	8,268	75%	6,201	75%	6,201

7.1.3.6 Fuel and Electricity Prices

The listed prices for gasoline and diesel were provided by the City based on its historic and expected

rates. The Price of CNG was provided through a sample of Canadian and US prices. The price of hydrogen was provided by two Gas Utilities, Liberties and Charbone. Notably, the price of green hydrogen is expected to be much higher in the short term and is only expected to reach the anticipated price of $8 per kg using large scale production methods and access to cheap energy. Charbone estimated the unit price of hydrogen to be closer to $12 per kg early in the adoption. The uncertainty in price will pose a risk to the City should a hydrogen strategy be selected, though industry partnerships may be available to mitigate exposure to high prices.

The energy rates were provided by Saint John Energy. These rates are variable based on the monthly peak power demand (100kWh/kW). For example, if the peak power load was 100kW, the first 10,000kWh would be priced at the first rate of $0.107, with the remaining energy consumed that month being priced at $0.0759.

Table 7.10 GFP Fuel Costs

Unit Cost of Fuel and Electricity	Fuel Unit	Cost ($)
Gasoline	Litre (L)	1.3241
Diesel	Litre (L)	1.3561
CNG	Kilogram (Kg)	1.0600
Hydrogen	Kilogram (Kg)	8.0000
Electricity/Energy (First 100kWh/kW)	Kilowatt-hour (kWh)	0.1070
Electricity/Energy (After 100kWh)	Kilowatt-hour (kWh)	0.0759

As is common for electrical utilities, in addition to paying for the energy consumed, Saint John energy also charges a fee for the service connection (the "Service Charge"), as well as a Demand Charge which is calculated based on the monthly power consumption peak. For example, should the monthly peak reach 100kW, the Demand Charge for that month would be $592.00 and the Service Charge would be $16.55. This calculation is then repeated for each month of the year to generate the total Utility Cost. Note that the energy cost for buying electricity is included in the GFP's "Fleet Fuel Cost" output, despite technically being a fee charged by the Utility. This decision is aligned with categorizing CNG and Hydrogen as a fuel cost rather than a Gas Utility fee, as it enables the like-for-like comparison of fuel/energy consumption and cost between various vehicle technologies.

Table 7.11 GFP Utility Fees

Additional Utility Fees	Interval	Cost ($)
Service Charge	Monthly	16.55
Demand Charge	Monthly	5.92 per kW

7.1.3.7 Fuel and Electricity Emission Factors

The fuel emission factors were sourced from the City's 2015 baseline to ensure that any fuel reductions would be compared equivalently to the City's emission target baseline. This is important for the like-for-like comparison as previous calculations used an average emission factor, when in reality different exhaust systems impact the mix of emissions produced by the consumption of fuel. This leads to different CO_2e emissions based on the vehicle being used, which wasn't considered in the baseline. Hydrogen is a new

addition to the 2015 fuel list. Any hydrogen purchased by the City is expected to be Green Hydrogen, meaning that would have no emissions associated with its production or consumption.

Table 7.12 GFP Fuel Emissions Factors

Fuel Emission Factors	Fuel Unit	Emissions (CO_2e)
Gasoline	Litre (L)	0.002440
Diesel	Litre (L)	0.002683
CNG	Kilogram (Kg)	0.003022
Hydrogen	Kilogram (Kg)	0.000000

The emissions generated from the use of energy in a BEV is different than the use of the fuels listed above in that there is no "downstream" or "tailpipe" emissions. Rather the emissions are produced by the electrical grid as the energy is consumed by the grid to recharge batteries. This means that the carbon footprint from using electrical energy as a fuel is determined by the grid's carbon intensity, a measure of how much CO_2e is generated per unit of electrical energy produced. This can be measured in two ways, as a carbon intensity for "generation" or a carbon intensity for "consumption". The latter of which includes losses in efficiency and electrical distribution.

The 2015 baseline used the carbon intensity for "production"; however, Saint John Energy has advised that since energy is purchased from NB Power the "consumption" carbon intensity should be used. For this comparison, the 2015 baseline does not need to be adjusted as there no electrical energy consumed by transportation assets. The most recently published figures for New Brunswick were included in Canada's 2021 National Inventories Report to the United Nations Framework Convention on Climate Change (UNFCCC). This shows a consumption intensity of 270 grams (or 0,00027 Tonnes) of CO_2e per kWh. This value shows progress in the decarbonization of New Brunswick's electrical grid, with each year showing a lower carbon intensity.

The current legislative target provided by Saint John Energy indicates that electrical utilities are required to reach net-zero emissions by 2050. However, indications from the federal government and industry suggest that a more ambitious target may be mandated in the near future. The Liberal party has outlined their plan for a "Cleaner, Greener Future" which includes the following statement:

Canadian Target: Introduce a Clean Electricity Standard to achieve a 100% net-zero emitting electricity system by 2035 and build a prosperous net-zero economy by 2050

These initiatives mirror targets set by the United States which aim decarbonize their power sector by 2035 and achieve a net-zero economy later than 2050.

American Target: To create a carbon pollution-free power sector by 2035 and net zero emissions economy by no later than 2050.

Given these targets, the GFP will assume a linear decarbonization of the electrical grid, achieving zero-emissions by 2035. However, it should be acknowledged that despite consultations being launched regarding the implementation of these target, no formal legislation has been adopted to mandate the 2035 target. The 2035 target was chosen as the preferred forecast for electrical grid decarbonization through consultation with the City project committee.



Figure 14 GFP Electrical Emissions

7.1.3.8 Carbon Tax

In 2019, the Canadian Federal Government implemented Carbon pollution pricing systems across Canada. In this model any province or territory can design its own pricing system tailored to local needs and compliant to the federal benchmark or can choose the federal pricing system. New Brunswick's Output-Based Pricing System meets federal benchmark and stringency requirements as is expected to evolve in step with the federal benchmarks increasing carbon price. The implication for carbon pricing is that the minimum benchmark price of $50 per tonne of CO_2e in 2022 is expected to increase by $15 per year up to a high of 170 per tonne in 2030. How this is implemented in the province of New Brunswick may vary based on the implementation of the provincial system, however in lieu of specifics, the GFP will use the federal minimum as its carbon tax pricing forecast.



Figure 15 Federal Carbon Tax Escalation

7.1.3.9 Infrastructure Investments

The amount and type of infrastructure required to support the deployment of the different technologies varies between scenarios. For this reason, the magnitude and timing of infrastructure investment varies as well.

Beginning with Scenario 1 – BAU, no infrastructure investment is forecasted.

For Scenario 2 – BEV, the facility will require modification to accommodate the size and storage of electric vehicles and the scale deployment will require electrical utility upgrades. These costs are summarized in Table 7.3 below. Note that the cost estimates for the switchboard upgrades were estimated to accommodate 8MW of power, while the predicted requirement was refined to 3MW over the course of the analysis. It is likely that the cost to provided sufficient infrastructure will be lower than the values used in the GFP.

Table 7.13 Scenario 2 Infrastructure Investments

Scenario 2 - BEV	Cost ($)
General Facility Modifications	$30,000
Bayside Substation Circuit Upgrade	$500,000
Switchboard Upgrades	$2,000,000
(2x) 2MW Transformer	$500,000

Total	$3,030,000

For Scenario 3 – FCEV, the facility will require significant modification to safely accommodate vehicles powered by hydrogen gas due to the combustible nature of gaseous fuels. The heavy-duty vehicles in the transit and public fleets are expected to be refuelled using slow-fill dispensers located in dedicated parking locations. A fast-fill dispensing station is planned to serve the light duty fleet as well as heavy duty vehicles that will not be stationed at the McDonald Street depot, namely firefighting apparatus. Note that fast-filling a light duty vehicle with hydrogen is expected to take marginally longer than the time expected to fill a gasoline or diesel tank. An example would be 15 minutes to fill a hydrogen tank compared to less than 10 minutes to fill a gasoline vehicle.

Table 7.14 Scenario 3 Infrastructure Investments

Scenario 3 - FCEV	Cost ($)
General Facility Modifications	$800,000
Hydrogen Refuelling Station	$11,905,000
Total	$12,705,000

For Scenario 4 – CNG to BEV, the infrastructure investments are very similar to Scenario 2 as the only difference is that CNG vehicles will be employed as a transitional technology before implementing a 100% BEV fleet. This means that the facility will require all the same investments as Scenario 2 in addition to facility modifications to accommodate CNG vehicles (due to the combustible nature of gaseous fuels) and a CNG refuelling station. The refuelling strategy is to slow fill the vehicles overnight with slow-fill posts installed in designated parking stalls. To add resiliency to fleet operations, one fast-fill post will provide quick refuelling as is required. With regard to refuelling time, a CNG fast-fill location will take 50% longer to refuel than from using diesel refuelling stations. However, the actual time to fill depends on the configuration of the fast-fill post, cheaper posts are slower, whereas more expensive posts can match the diesel fuel time.

Table 7.15 Scenario 4 Infrastructure Investments

Scenario 4 – CNG to BEV	Cost ($)
General Facility Modifications (for CNG)	$800,000
CNG Refuelling Station	$835,000
All Scenario 2 Infrastructure Investment	$3,030,000
Total	$4,665,000

7.1.3.10 Refuelling Station Operating Costs

The maintenance and personnel component includes the considered a conservative estimate of routine maintenance/inspections costs including compressor overhauls. The electricity component is based on the compression equipment selected plus an additional 10% for ancillaries. The electricity cost to operate this equipment was included following electricity rates in New Brunswick.

Table 7.16 Annual Refuelling Station Operating Costs

Annual Refuelling Station OPEX	CNG	Hydrogen
Maintenance and Personnel	$11,370	$178,400
Electricity	$6,200	$97,000
Training	$4,360	$4,360
Total	$21,930	$277,230

7.1.3.11 Charging Equipment

The fees to install charging equipment was calculated on a per unit basis including the equipment and installation costs. The equipment cost represented the physical system purchased, while the installation cost included the necessary wiring and connections necessary for the equipment to function. It is possible that the City may find savings regarding installation fees through bulk purchases and a phasing plan that includes future proofing infrastructure to more readily except future equipment installations.

Table 7.17 Charging Equipment and Installation Costs

Charger Prices	7.2kW (AC)	50kW (DCFC)	150kW (DCFC)
Equipment	$1,500	$7,500	$135,000
Installation	$150	$3,000	$15,000
Total	$1,650	$10,500	$150,000

This charging equipment will need to be managed across the facility to ensure that the maximum power draw does not exceed infrastructure tolerance. Further benefits to management software are the allowance to lower the peak load (reducing utility fees), prioritize the charging of vehicles, and to incorporate other energy storage/generation assets. The connection fee listed by OEMs is in the range of $150 per charger per year. Additional fees would be applicable for more robust charge management software. The installed chargers will also require both preventive and corrective maintenance. These

services are expected to be contracted to a third party at the cost of $1,500 per charger per year.

7.1.3.12 Staff Safety, Tooling, and Training

The existing transportation budget for staff safety, tooling, and training is $30,550 per year. This includes items provided by the City, such as coveralls, gloves, visors, and other personal protective equipment (PPE). The training includes additional safety sessions, and conference fees for all relevant staff. Mechanic tooling refers to the tools allowance provided to each mechanic in order for them to maintain their toolbox, replacing tools as they are damaged.

Table 7.18 Existing Staff Safety, Tooling, and Training Costs

Staff Safety, Tooling, and Training	Annual Cost ($)
Personal Protective Equipment (PPE)	$14,750
Training (Including Conferences)	$5,000
Mechanic Tooling (Per Mechanic)	(24x) $450
Total	$30,550

When forecasting the cost of transitioning to alternative technologies it is understood that additional funding will be required in all categories. Electric vehicles are a good example for this as they will require new static free tools, non-conductive clothing and PPE, as well as training to enable City staff to perform new maintenance activities. Further, the risk of high voltage systems associated with BEVs requires that all staff, from service cleaners, to operators, to mechanics and welders will need safety training to be aware of high-voltage risks. Similar additional costs are associated with other fuel types, including electric hybrids (HEV), plug-in electric hybrids (PHEV), Compressed Natural Gas (CNG), and hydrogen fuel-cell (FCEV). Additional maintenance equipment can be phased in as the portion of new vehicle technologies grow and the maintenance team performs more service activities in-house. Therefore, the additional cost of each scenario was estimated as a factor of the existing budget. For the BEV and FCEV scenarios, some light duty hybrids are expected followed by a single fuel type, leading to an increase of 50%. For Scenario 4, the increase was estimated at 100% due to the further inclusion of CNG fuelled vehicles. These increases are summarized in Table 7.19.

Table 7.19 Charging Equipment and Installation Costs

Scenario Staff Costs	Scenario 2 (BEV)	Scenario 3 (FCEV)	Scenario 4 (CNG to BEV)
Factor	+50%	+50%	+100%
Total	$45,825	$45,825	$61,000

7.1.3.13 Additional GFP Considerations

The primary output of the GFP is the capital cost, operational cost, and environmental emissions associated with each pathway to zero emissions. Once a preferred approach is selected, additional opportunities may be identified to further optimize the transition. This may include bundled procurements, the award of additional external funds, innovative practices such as charging as a service (CaaS), and changes in service delivery such as implementing on-demand transit.

These quantitative outputs can be helpful in determining a preferred roadmap, however additional consideration is required for qualitative factors. In particular, the risks and opportunities explored in

Section 0 should be used as a reference in understanding how successful various technologies are in meeting the needs of the city.

These items are considered alongside the results of the GFP in Section 7.3, which conclude in a final recommendation for planning the City's Carbon Migration Plan. The implementation opportunities and risks for the recommended scenario are explored in detail in Section 0.

7.2 GFP Results

7.2.1 Net Present Value Comparison

The gross cost comparison of the GFP scenario is a summation of all modelled costs over the 18-year period from 2022 to 2040. The net present value comparison uses the inflation rate and the discount rate to evaluate the costs in the context of 2022 Canadian dollars, reflective of the time value of money. Using the business-as-usual scenario as a baseline, scenarios 2 and 4 perform similarly well, with both being approximately 5% less expensive than the BAU. Conversely scenario 3 shows an increase of 18% above the cost of the BAU.

Table 7.20 GFP Net Present Value Comparison

City of Saint John Green Fleet Strategy	Scenario Results (NPV)			
Scenario Summary [Gross Costs]	**Saint John BAU**	**BEV**	**FCEV**	**CNG to BEV**
Model Duration	2022-2040	2022-2040	2022-2040	2022-2040
Total	**225,845,226**	**213,886,615**	**267,798,511**	**214,746,589**
NPV GHG Comparison	**100.0%**	**94.7%**	**118.6%**	**95.1%**
NPV Difference		**-5.3%**	**18.6%**	**-4.9%**

7.2.2 Real Cost Comparison

Reals costs are calculated by expanding the nominal cost by the inflation rate. This represents the inflation adjusted price of procurements between 2022 and 2040. Scenarios 2 and 4 show total gross costs of approximately $284 million, while the BAU is higher near $293 million, and scenario 3 is the most expensive at $357 million. The summary breakdown of gross costs is presented for each scenario in Table 7.21.

Notably the expected external funding amounts to $12.5 million based on the funding expectation inputs. It is expected that the external funding contribution will exceed this amount by strategically timing procurement to occur when funding is available, rather than uniformly each year. Further external funds would be available if the City is successful in securing additional external funding sources, such as the Zero Emission Transit Fund (ZETF).

Table 7.21 GFP Gross Cost Comparison

City of Saint John Green Fleet Strategy	Scenario Results (Real)			
Scenario Summary [Gross Costs]	**Saint John BAU**	**BEV**	**FCEV**	**CNG to BEV**
Model Duration	2022-2040	2022-2040	2022-2040	2022-2040
CAPEX - Public Fleet				
Gross Fleet Renewal Cost	81,043,400	100,943,581	117,557,827	102,428,147
Gross External Funding	-	(1,920,050)	(2,425,530)	(1,920,050)
Gross Infrastructure Cost	-	4,510,663	7,368,900	5,506,916
Sub-total	**81,043,400**	**103,534,194**	**122,501,197**	**106,015,013**
OPEX - Public Fleet				
Gross Fleet maintenance Cost	41,493,963	34,541,052	35,562,493	33,985,699
Gross Fleet Fuel Cost	54,114,632	29,352,185	44,246,760	26,382,838
Gross Fleet Charging Utility Cost	-	1,500,631	-	1,489,365
Gross Fleet Infrastrucutre and Staff Operations Costs	455,611	2,565,543	4,425,905	3,262,566
Gross Fleet Carbon Tax	7,877,366	3,083,844	3,087,020	2,948,480
Sub-total	**103,941,572**	**71,043,255**	**87,322,177**	**68,068,947**
CAPEX - Transit Fleet				
Gross Fleet Renewal Cost	46,028,460	80,331,343	105,321,072	80,331,343
Gross External Funding	-	(10,639,565)	(13,979,669)	(10,639,565)
Gross Infrastructure Cost	-	3,275,508	5,893,830	4,178,665
Sub-total	**46,028,460**	**72,967,285**	**97,235,233**	**73,870,443**
OPEX - Transit Fleet				
Gross Fleet maintenance Cost	28,623,650	23,463,209	23,463,209	23,463,209
Gross Fleet Fuel Cost	25,415,959	9,854,157	21,391,566	9,854,157
Gross Fleet Charging Utility Cost	-	1,151,935	-	1,151,935
Gross Fleet Infrastrucutre and Staff Operations Costs	371,820	969,866	3,267,808	1,155,777
Gross Fleet Carbon Tax	7,496,744	1,488,025	1,488,025	1,488,025
Sub-total	**61,908,174**	**36,927,192**	**49,610,609**	**37,113,102**
Fleet Totals				
Gross Public Fleet	184,984,973	174,577,449	209,823,375	174,083,960
Gross Transit Fleet	107,936,634	109,894,478	146,845,842	110,983,545
Total	**292,921,607**	**284,471,927**	**356,669,216**	**285,067,505**

7.2.3 Environmental Emission Comparison

When comparing the environmental emissions of each green scenario, all scenarios perform similarly in reducing 50% or more emissions between 2022 and 2040. This amounts to a reduction in close to 40,000 tonnes of CO_2e. The difference in reduction is due to the progressive decarbonization of the electrical grid, whereas green hydrogen is carbon neutral beginning in 2022. Scenario 4 shows additional emission reductions through inclusion of CNG. Notably each green scenario reaches zero emissions by 2040.

Table 7.22 GFP Gross Emission Comparison

City of Saint John Green Fleet Strategy	Scenario Results (Real)			
Scenario Summary [Gross Emissions]	**Saint John BAU**	**BEV**	**FCEV**	**CNG to BEV**
Gross Public Fleet Emissions [Tonne CO2]	32,689	22,845	22,766	22,113
Gross Transit Fleet Emissions [Tonne CO2]	42,040	13,737	13,299	13,737
Total	**74,729**	**36,582**	**36,065**	**35,850**
Sub-totals	**100.0%**	**49.0%**	**48.3%**	**48.0%**
Difference		**-51.0%**	**-51.7%**	**-52.0%**

7.2.4 GFP Year 2040 Indicators

When planning future vehicle deployments, an insight that can provide additional value is forecasted scenario performance for the last year of the model. This shows that the GFP predicts no emissions for any green scenario. Regarding predicted costs, the year 2040 involves many renewals which shows that capital costs remain higher for green scenarios, particularly for transit vehicles. The inverse is true for the operational cost where significant savings are anticipated for all green scenarios.

Table 7.23 GFP Year 2040 Forecast

City of Saint John Green Fleet Strategy	Scenario Results (Real)			
Scenario Summary [2040 Indicators]	**Saint John BAU**	**BEV**	**FCEV**	**CNG to BEV**
CAPEX - 2040				
Public Fleet	5,713,844	6,222,587	7,468,856	6,222,587
Transit Fleet	2,737,082	5,663,406	7,070,394	5,675,223
OPEX - 2040				
Public Fleet	2,637,599	1,749,806	1,881,686	1,749,806
Transit Fleet	4,015,227	1,794,708	2,833,836	1,806,525
Total	**15,103,752**	**15,430,507**	**19,254,772**	**15,454,142**
Envm - 2040				
Public Fleet	2,325	-	-	-
Transit Fleet	2,213	-	-	-
Total	**4,538**	**-**	**-**	**-**

7.2.5 Scenario Capital Cost Figures (CAPEX)

7.2.5.1 Public Fleet CAPEX

The following figures (Figure 16 to Figure 19) show the anticipated capital cost for each scenario based on expected public fleet renewals. The values are provided in inflation-adjusted real dollars and compared with the budget for public fleet renewal. The replacements follow a strict replacement schedule which leads to some years exceeding the budget, with other years falling well below. This is expected due to the high price to renew heavier and more specialized vehicles (Ex: fire trucks), leading to alternating years of high expenses. The City is able to carry surplus budget in its fleet fund from one year to the next, meaning that this procurement outline is tenable.

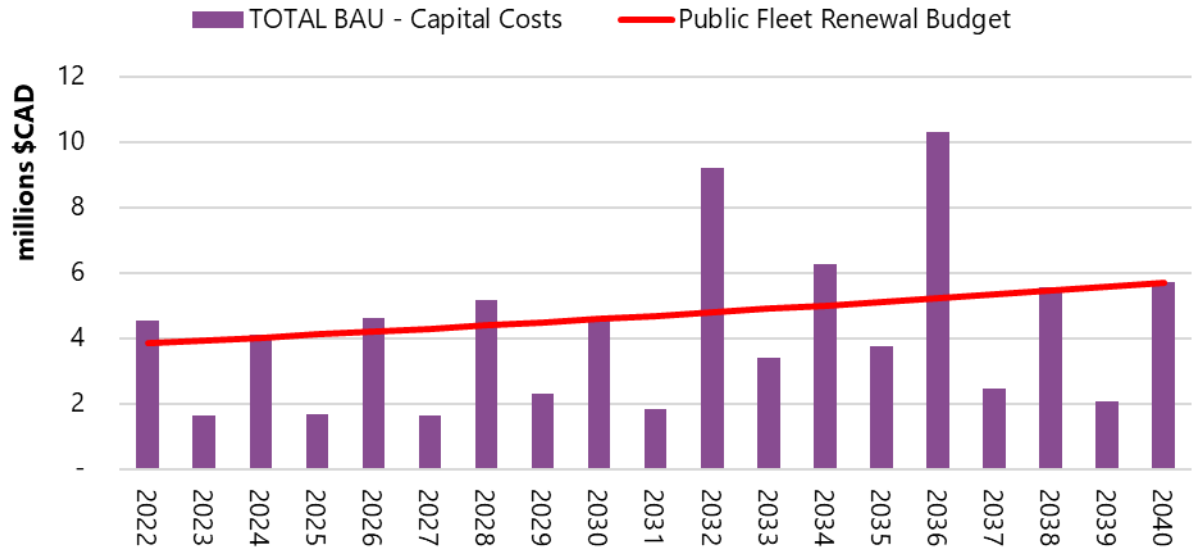


Figure 16 GFP Public Fleet CAPEX Scenario 1 – BAU

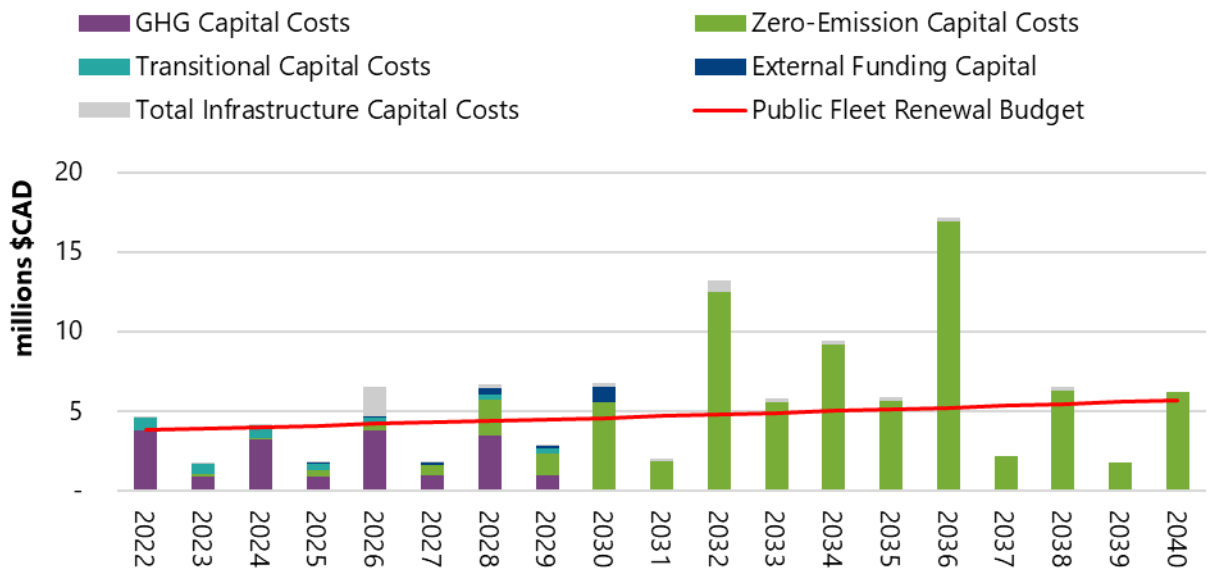


Figure 17 GFP Public Fleet CAPEX Scenario 2 – BEV

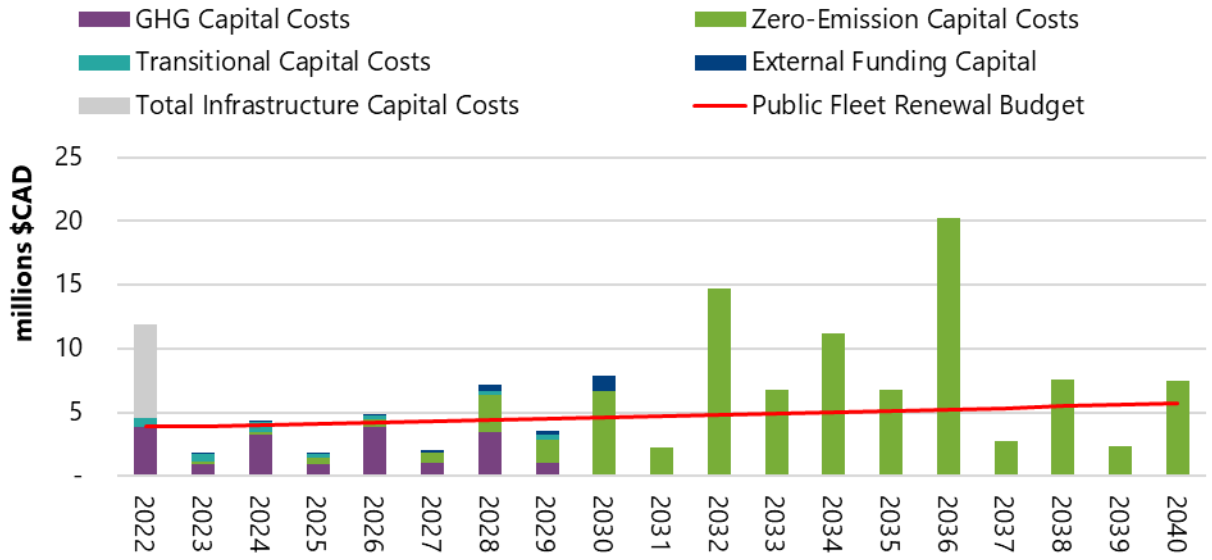


Figure 18 GFP Public Fleet CAPEX Scenario 3 – FCEV

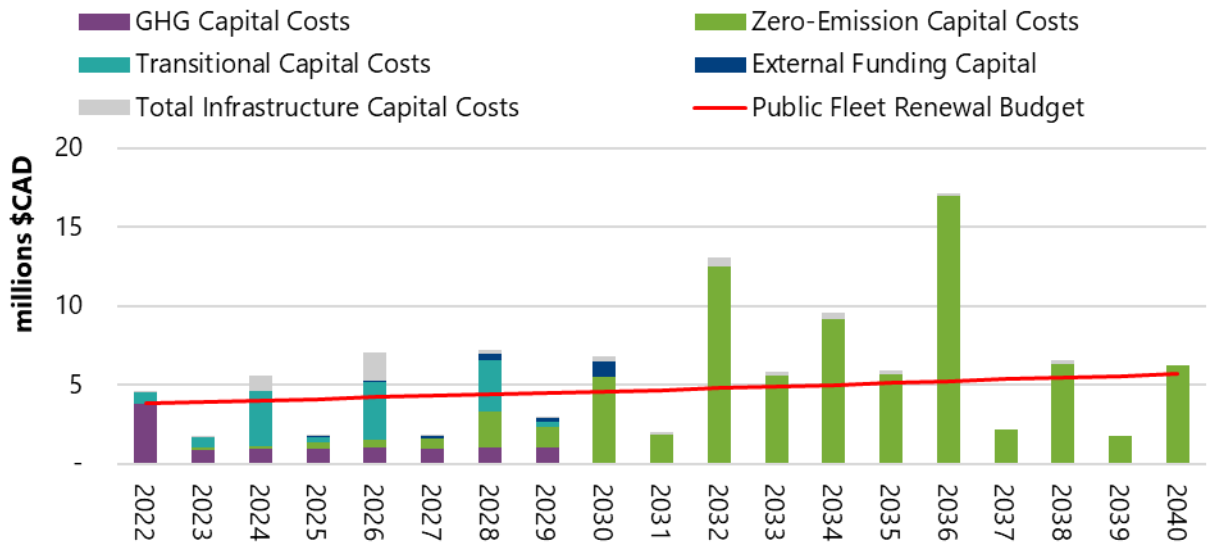


Figure 19 GFP Public Fleet CAPEX Scenario 4 – CNG to BEV

7.2.5.2 Transit Fleet CAPEX

The following figures (Figure 20 to Figure 23) show the anticipated capital cost for each scenario based on expected transit fleet renewals. The values are provided in inflation-adjusted real dollars and compared with the budget for public fleet renewal.

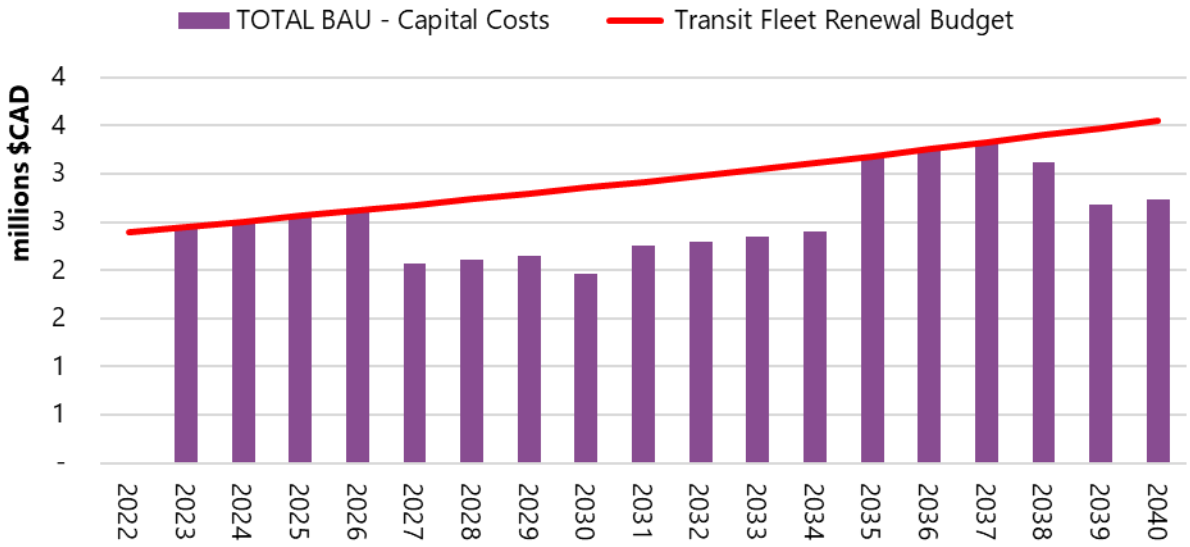


Figure 20 GFP Transit Fleet CAPEX Scenario 1 – BAU

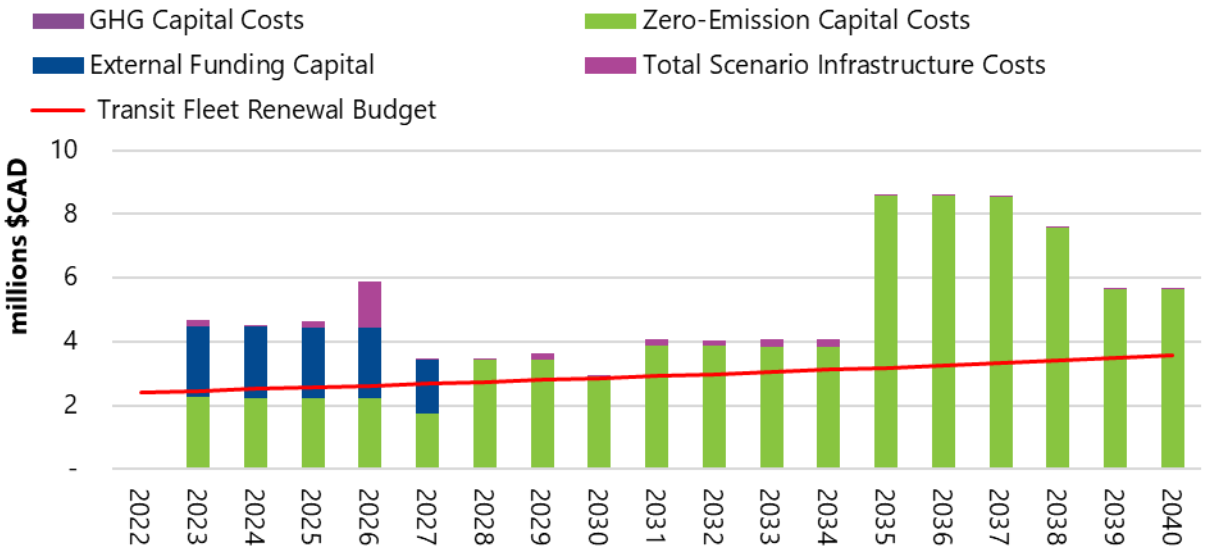


Figure 21 GFP Transit Fleet CAPEX Scenario 2 – BEV

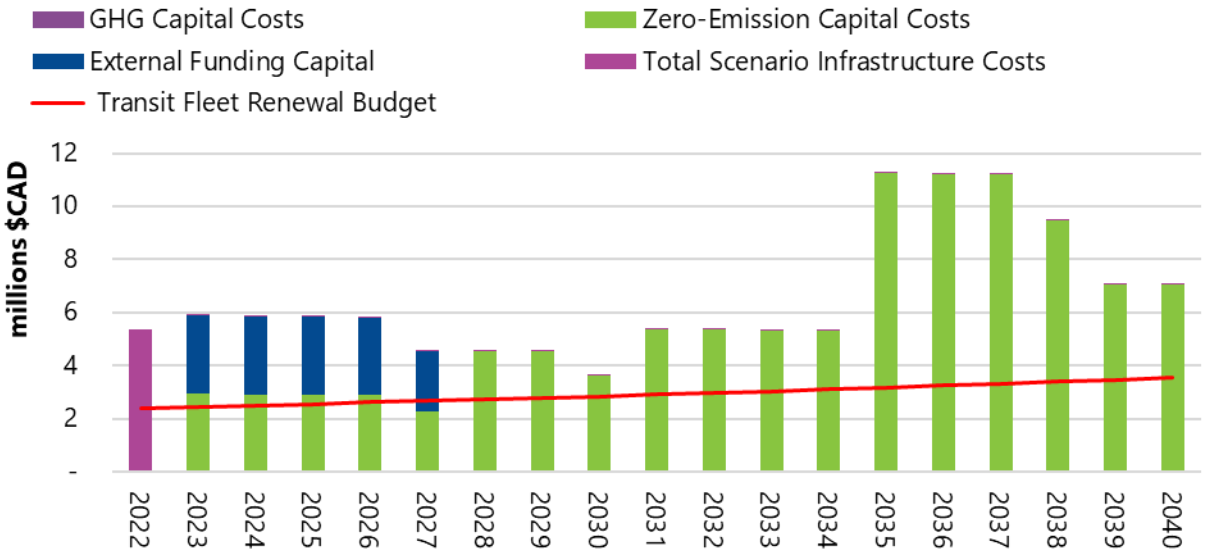


Figure 22 GFP Transit Fleet CAPEX Scenario 3 – FCEV

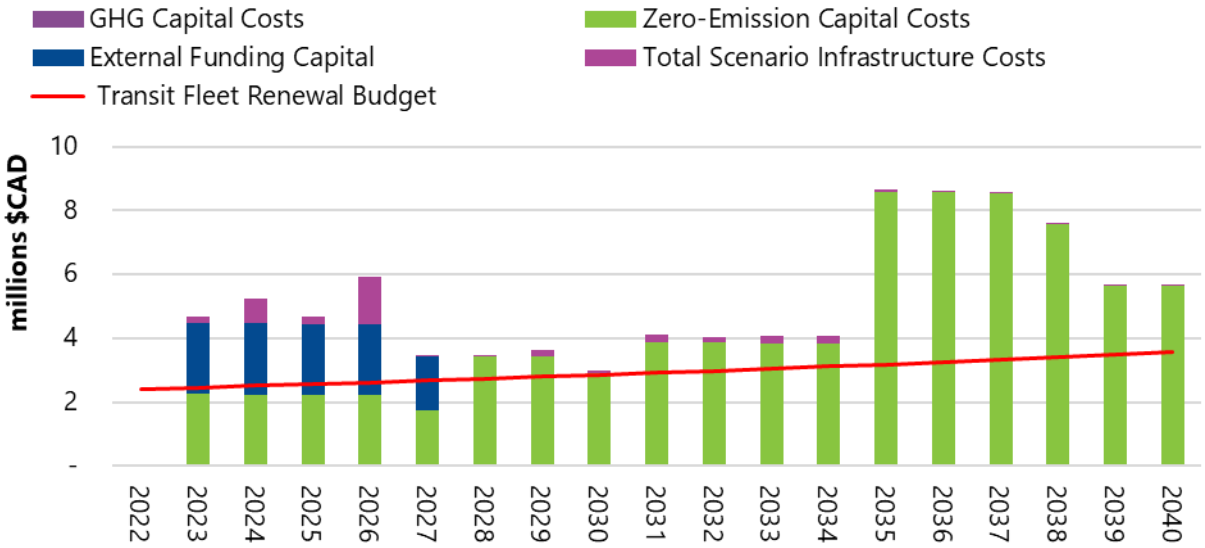


Figure 23 GFP Transit Fleet CAPEX Scenario 4 – CNG to BEV

7.2.6 Scenario Operational Cost Figures (OPEX)

7.2.6.1 Public Fleet OPEX

The following figures (Figure 24 to Figure 26) show the anticipated operational cost for each scenario based on performing service miles with each type of vehicle technology. The values are provided in inflation-adjusted real dollars and are compared with the BAU cost estimate.

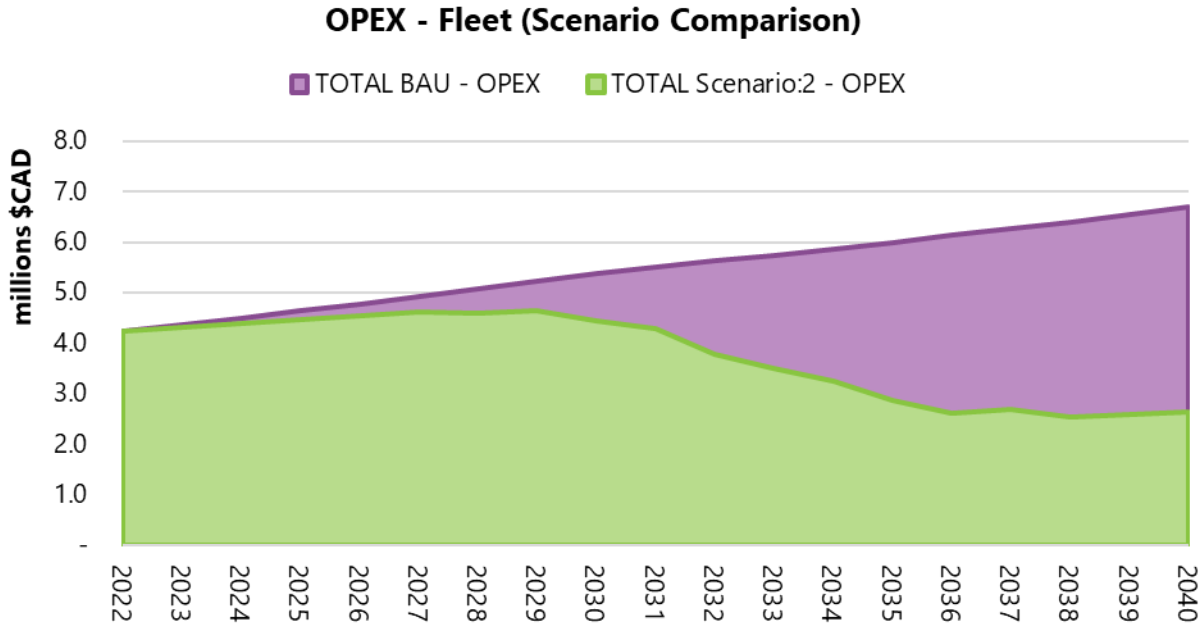


Figure 24 GFP Public Fleet OPEX Scenario 2 – BEV

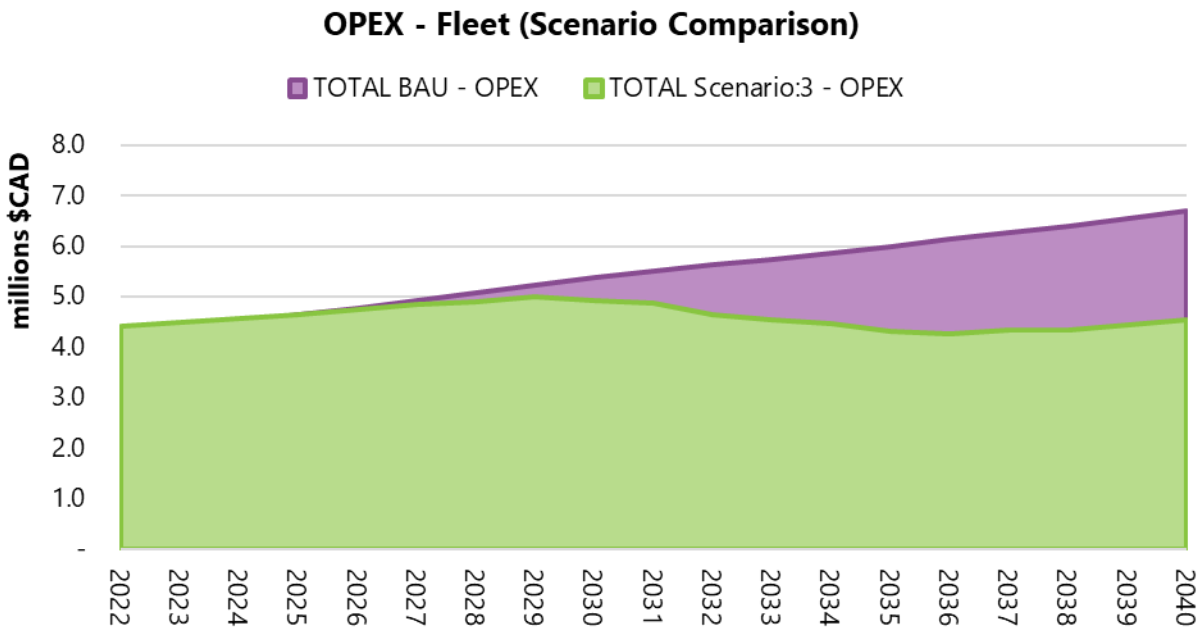


Figure 25 GFP Public Fleet OPEX Scenario 3 – FCEV

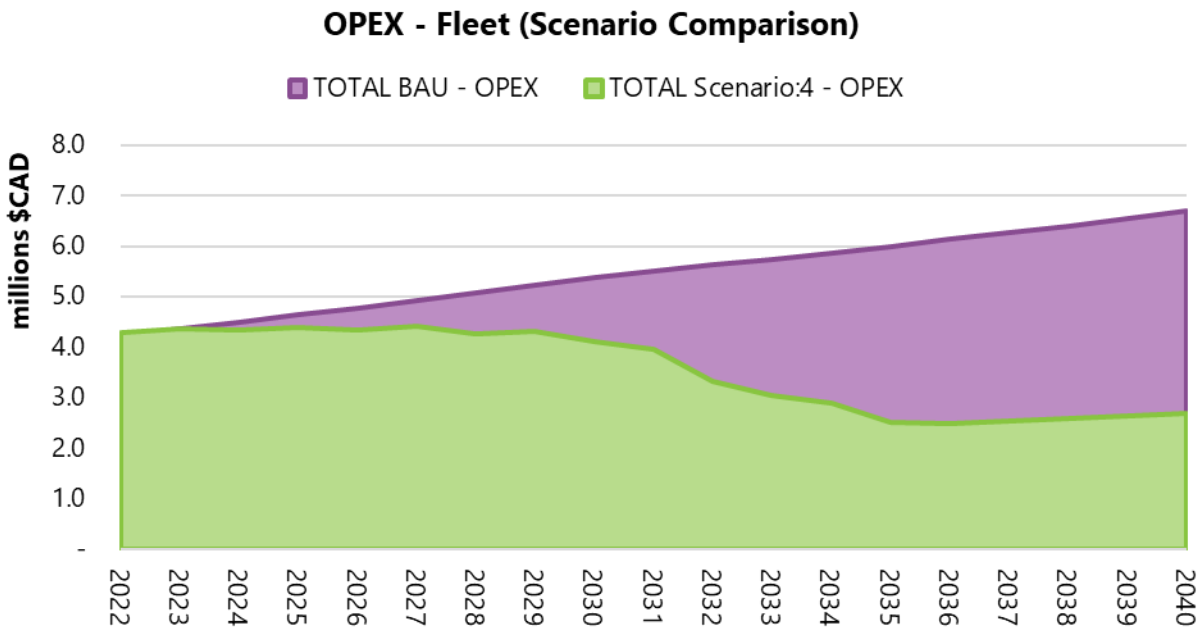


Figure 26 GFP Public Fleet OPEX Scenario 4 – CNG to BEV

7.2.6.2 Transit Fleet OPEX

The following figures (Figure 27 to Figure 29) show the anticipated operational cost for each scenario based on performing service miles with each type of vehicle technology. The values are provided in inflation-adjusted real dollars and are compared with the BAU cost estimate.

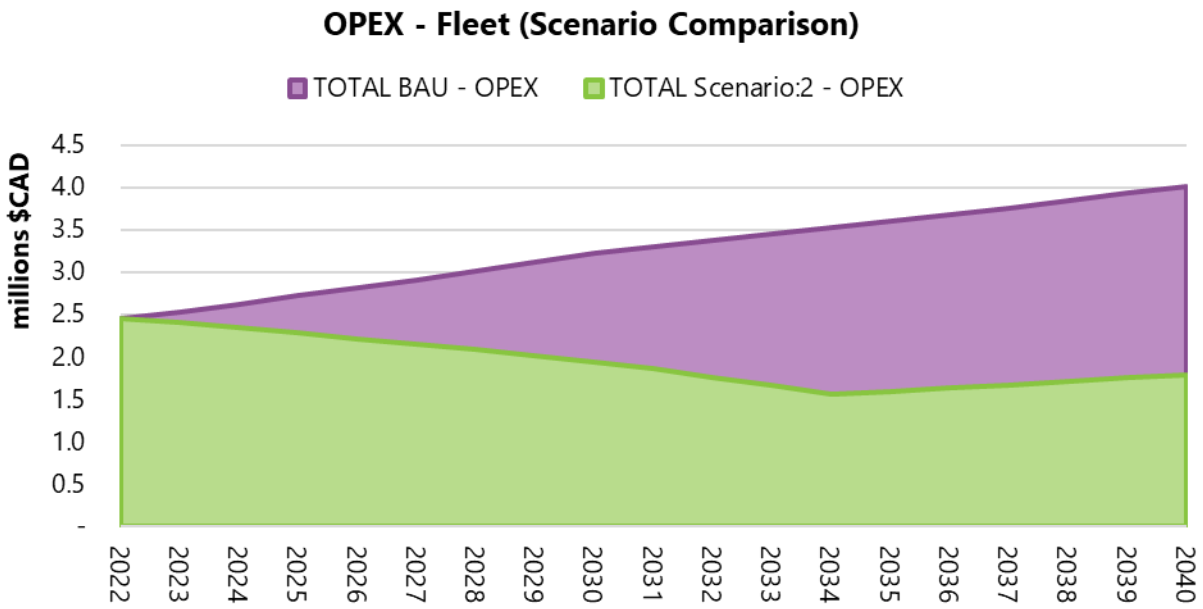


Figure 27 GFP Transit Fleet OPEX Scenario 2 – BEV

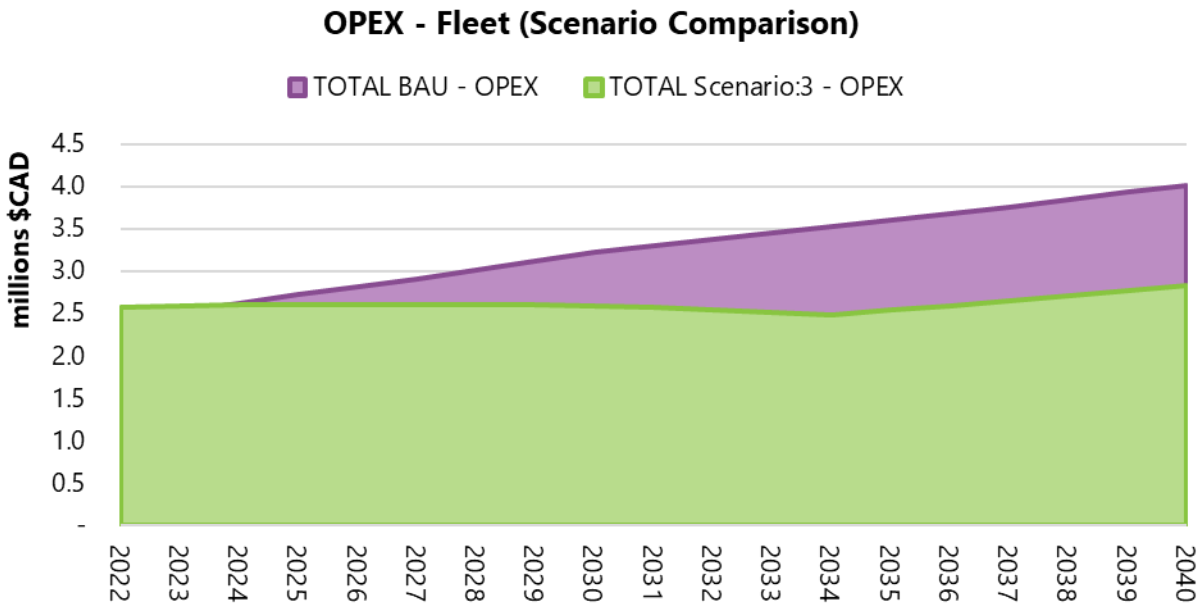


Figure 28 GFP Transit Fleet OPEX Scenario 3 – FCEV

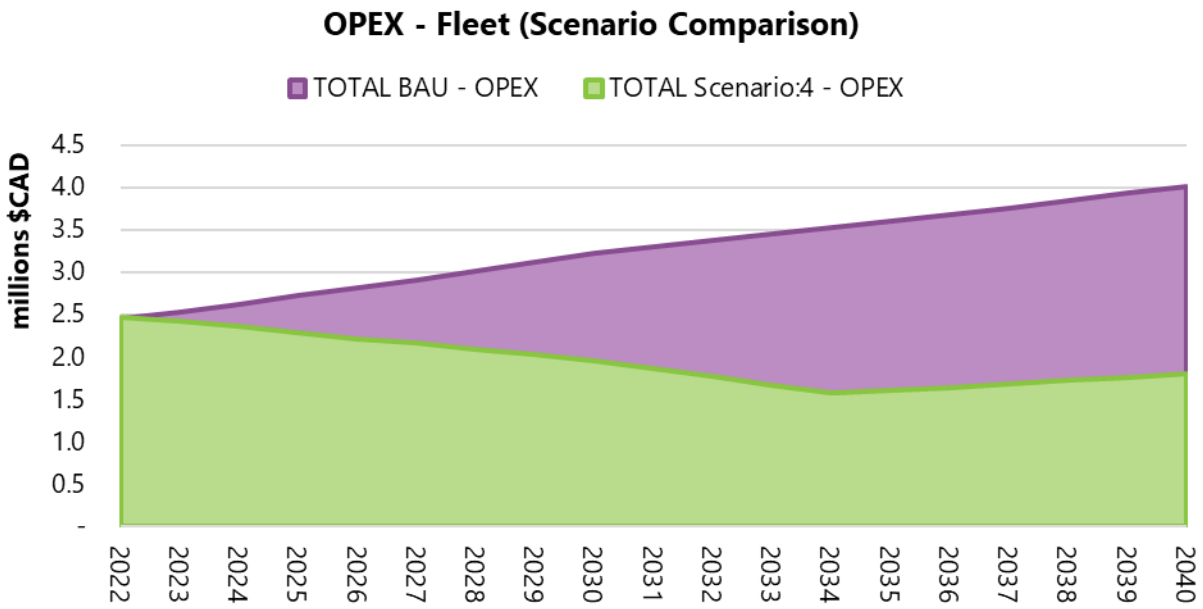


Figure 29 GFP Transit Fleet OPEX Scenario 4 – CNG to BEV

7.2.7 Scenario Environmental Emission Figures

7.2.7.1 Public Fleet Environmental Emissions

The following figures (Figure 30 to Figure 32) show the anticipated environmental emissions for each scenario based on performing service miles with each type of vehicle technology. The values are provided in tonnes of CO_2 equivalent (CO_2e) emissions and are compared with the BAU cost estimate.

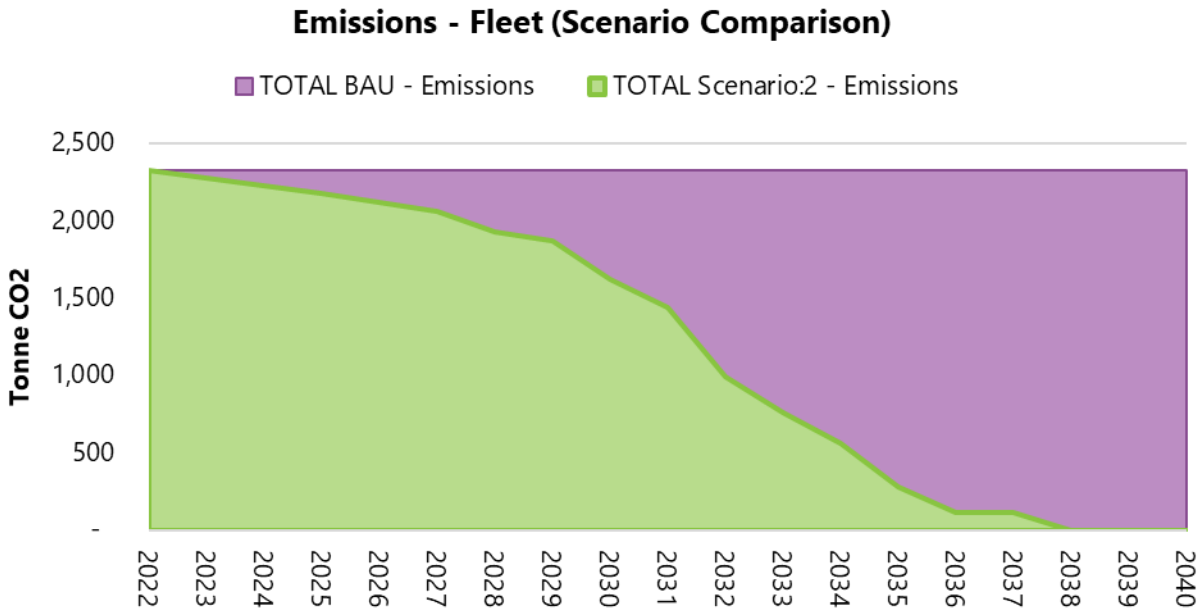


Figure 30 GFP Public Fleet Environmental Emission Scenario 2 – BEV

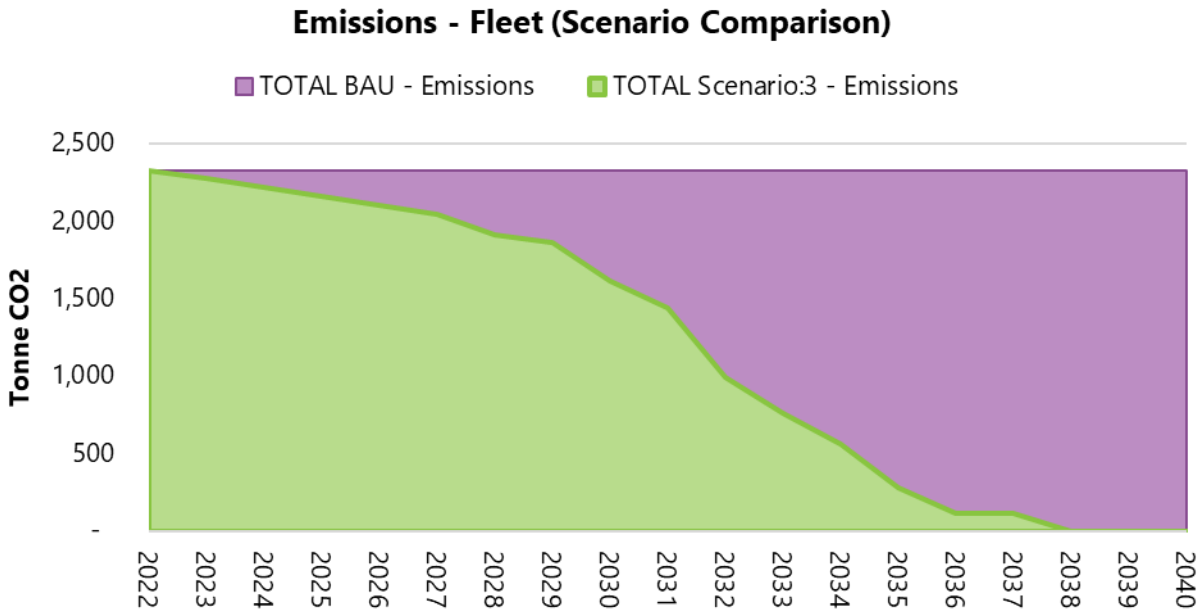


Figure 31 GFP Public Fleet Environmental Emission Scenario 3 – FCEV

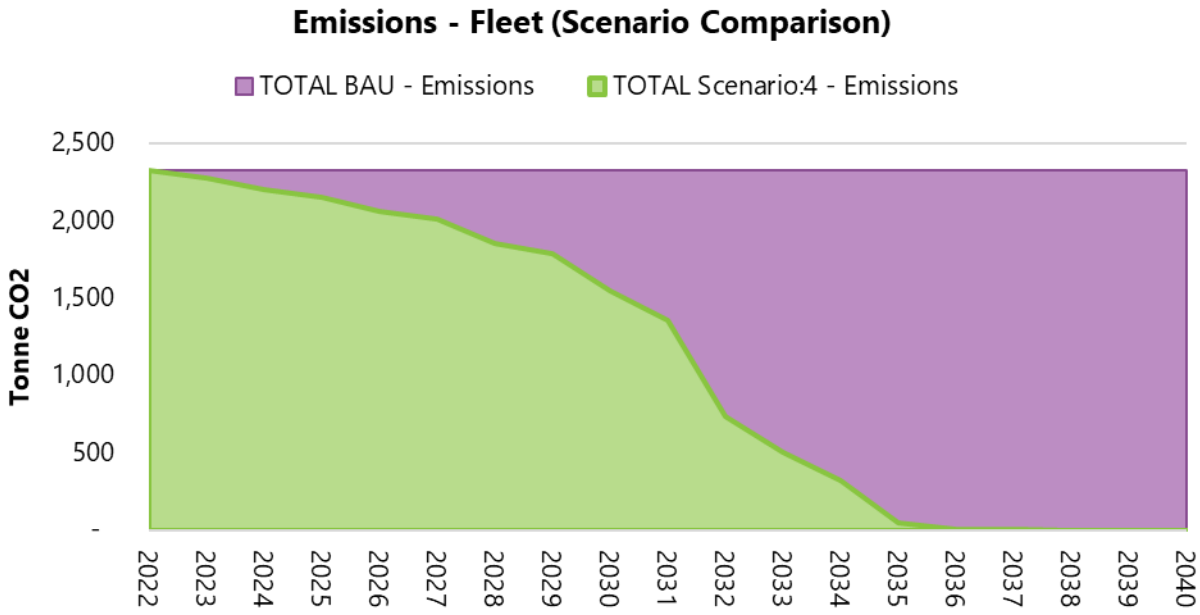


Figure 32 GFP Public Fleet Environmental Emission Scenario 4 – CNG to BEV

7.2.7.2 Transit Fleet Environmental Emissions

The following figures (Figure 33 to Figure 35) show the anticipated environmental emissions for each scenario based on performing service miles with each type of vehicle technology. The values are provided in tonnes of CO_2 equivalent (CO_2e) emissions and are compared with the BAU cost estimate.

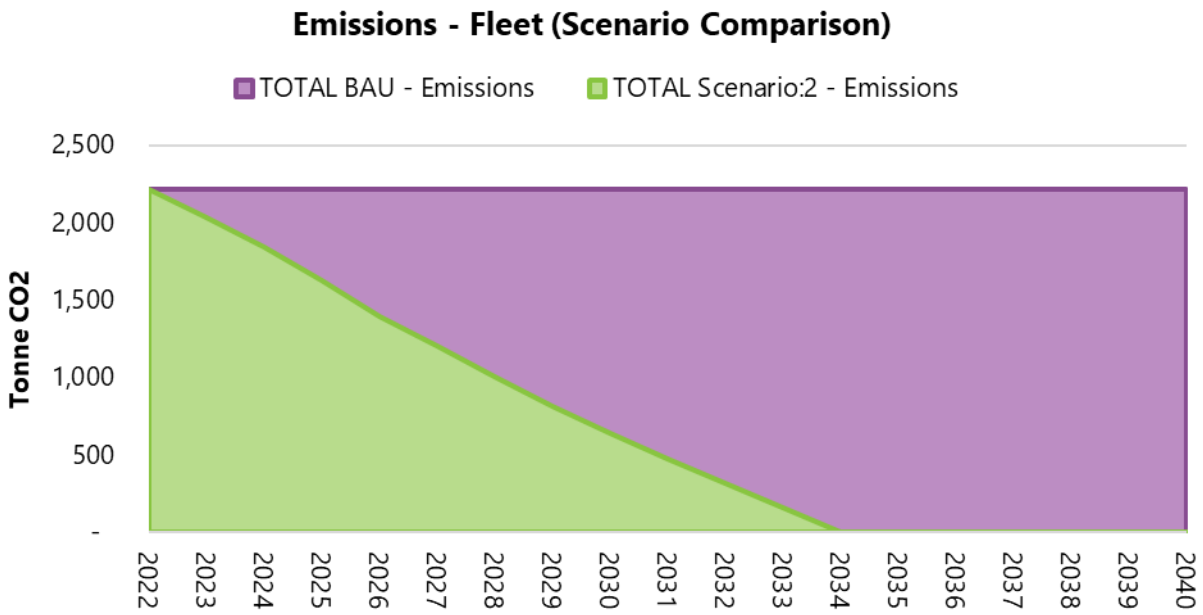


Figure 33 GFP Transit Fleet Environmental Emission Scenario 2 – BEV

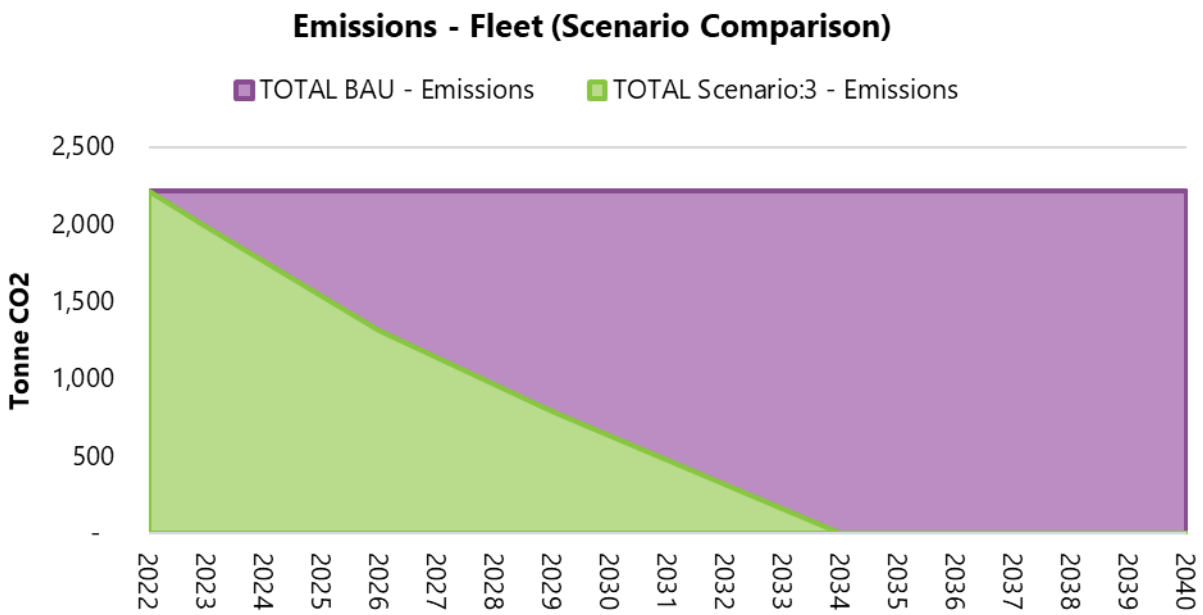


Figure 34 GFP Transit Fleet Environmental Emission Scenario 3 – FCEV

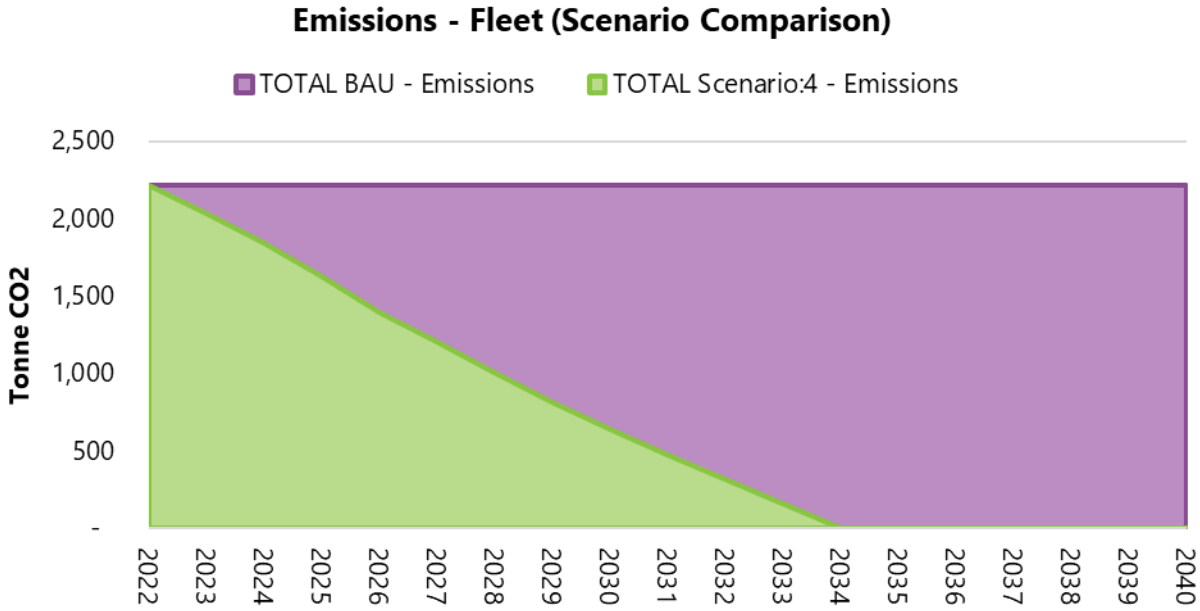


Figure 35 GFP Transit Fleet Environmental Emission Scenario 4 – CNG to BEV

7.3 GFP Conclusion

7.3.1 Overall Results

The primary finding from the GFP is that a battery-electric focused transition would be less costly than a transition to hydrogen fuel-cell. The battery-electric scenarios are so competitive that they are less costly than continuing to operate existing diesel and gasoline technologies. In terms of emissions, all scenarios are similarly effective in reducing emitted tonnes CO_2e by 50% or more between 2022 and 2040, while meeting the City's 2025 and 2040 emission targets.

Note it is the opinion of the analysts that the BEV scenarios are generally conservative regarding costs, whereas the FCEV scenario represents a more optimistic forecast of the nascent technology.

- Examples of conservative estimates for the BEV scenario include the pricing of electricity and electrical infrastructure upgrades. The existing electricity rates have no incentives for off peak use or electric vehicles which are being explored nationwide (including in New Brunswick). Further, the infrastructure investment was calculated based on preliminary requirements and were sized for 8MW of demand, rather than the refined estimate of 3MW which may results in a significantly reduced cost.
- Examples of optimistic estimates for the FCEV scenario include the hydrogen fuel itself, which was assumed to be green hydrogen available as required at a delivered rate of $8 per kg. This $8 cost is the optimistic range of scaled production costs, with the high-end estimate being 12$ per kg. It is possible that green hydrogen reliable availability of hydrogen be lower than expected while the current price remains high. Current prices are approximately $16 per kg that rate and are only expected to decrease as the market grows. The optimistic estimate was chosen under the assumption that significant private investment will be available to bridge the gap, facilitated by groups such as the Atlantic Hydrogen Alliance.

The BEV scenario outperformed the FCEV scenario despite a being a conservative estimate compared to optimistic outlook. This allows us to confidently say that a battery electric pathway to zero emissions is preferable following current technology trends.

7.3.2 CNG to be Excluded

The cost of incorporating CNG class 5,6, and 7 truck platforms is very similar to continuing to operate diesel vehicles until battery electric products become available. When comparing scenario performance, incorporating CNG slightly more expensive, with an increase of 0.4% NPV, while reducing net emissions by 1%. This close result means that qualitative factors and the City's strategic intent should be referred to when deciding which approach is preferable.

When assessed through a qualitative lens, the preferred approach is to not incorporate CNG technologies in the fleet. The reason for which is explained in the following themes:

- **Long Term Commitment**: A CNG deployment requires significant capital investment ($1.6 to $2.0 Million) which mostly recuperated over 15 years through operational savings. If pursued, the City will have less flexibility in changing to a new technology type, should green technologies mature more quickly than expected. Should green technologies mature more slowly, than the added benefit would be limited by the need to be net-zero by 2040.
- **Limited Piloting Period**: the opportunity to operate CNG vehicles begins in 2024 as the next group of Class 5, 6, 7 Truck Platforms are expected to be renewed. Before CNG vehicles can by deployed, facility modifications and refuelling infrastructure need to be constructed, in addition to equipping and training staff to operate and maintain the vehicles. The first five (5) CNG vehicles are expected in 2024, increasing to a peak of 16 by 2028. This will leave little time to properly pilot the vehicles to understand their performance in serving the variety of functions performed by the vehicle group.
- **Limited Procurement Period**: The expected useful life of the CNG vehicles is 10 years meaning that the phase-out period must begin in 2030, as new purchases would still be in operation past the carbon-neutral date of 2040. Based on forecasted procurements, this results in the CNG vehicles being retired between 2034 and 2037. Should CNG vehicles be procured after 2030, they would need to be retired early, leading to increased capital costs.
- **Multiple Technology Transitions**: Guiding two technology migrations for the City may limit staff buy-in, particularly if challenges arise when accommodation the CNG technology. If vehicles fail to meet staff expectations, it may lead to increased hesitation or resistance when asked to transition again, this time to green vehicles.

7.3.3 Acknowlogement of Long-term Planning Uncertainties

It is important to note that these results are contingent on the model inputs which have been forecasted using information currently available. As the City moves through its 18-year transition, technologies may develop differently than our contemporary forecasts. This may lead to hydrogen, or an entirely different technology, becoming more effective and less costly. Similarly, fuel and energy prices may significantly depart from what is experienced today, further changing the results of the financial analysis. Therefore, with the acknowledgement of the unknows inherent with long-term forecasting, the GFP represents an educated projection of the City's expected costs and emissions.

Using the GFP, the City aims to forge a path to a carbon-free future, rather than waiting to react to what the future holds.

8.0 Recommended Roadmap & Implementation Plan

8.1 Recommended Green Fleet Plan

The City of Saint John has already achieved its short-term targets and now needs to focus on its long-term transition. From the time of writing, the City has 18 years to transition its entire fleet to a new low-carbon technology. The analysis of today's technologies revealed that battery-electric is preferred, as it outperformed hydrogen fuel-cell technologies in terms of financials, opportunities, and risks. The roadmap lists actions necessary to make the transition a reality. Implementation recommendations are presented to add context to the City's next steps and opportunities that have the potential to improve the adoption of battery-electric technologies are explored.

Flexibility is also a key component of the plan. Depending on how innovative technologies like hydrogen fuel-cell vehicles mature over the next 18 years, the City's future fleet may comprise of a mix of green technologies. For this reason, the plan includes the reassessment of hydrogen fuel-cell technologies to ensure that the City can confidently move forward with the technology that best serves its needs. A summary of factors that are indicative of why the BEV scenario is recommended to the City of Saint John is presented below:

- Lowest overall cost: Net Present Value (NPV) shows the BEV scenario is 5% less expensive than continued operations with gasoline and diesel vehicles. Additional savings may be realized by leveraging implementation opportunities.
- Similar reduction in lifetime emissions compared to other green scenarios, resulting in a 50% reduction of emissions between 2022 and 2040, and carbon neutrality by 2040.
- Many pilot deployments are currently underway for both the public and transit fleet vehicles. This means that lessons learned from other cities throughout North America will be available to Saint John in time for their green fleet adoption.

8.2 Carbon Migration Strategy Roadmap

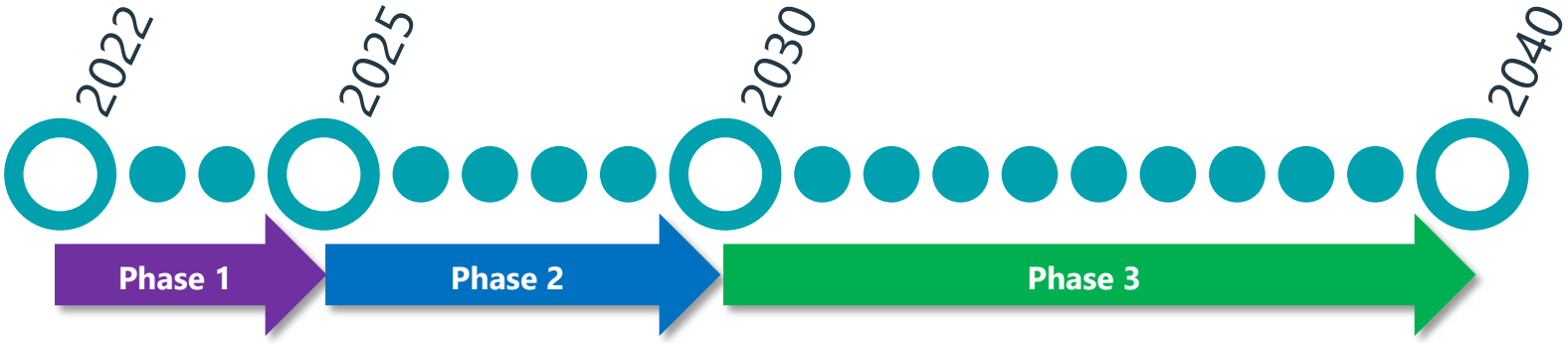
The roadmap developed for Low-Carbon Migration Strategy outlines the timeline of activities to be performed by the City between 2022 and 2040. It is divided into three phases, corresponding to short-, medium-, and long-term activities.

Phase 1 is the shortest of the three phases with a 3-year duration, beginning in 2022 with anticipated completion by 2025. Phase 1 serves as a launching point to explore funding programs, partnerships, and leverage implementation opportunities. "Easy win" battery electric vehicles will begin to be adopted to introduce the new technology to City staff. Pilot programs will begin for the vehicles planned for adoption in Phase 2. During this time the City will work with hydrogen producers and the Atlantic Hydrogen Alliance to explore partnerships that could potentially make fuel-cell technologies more competitive.

Phase 2 is five (5) years long from 2025 to 2030. During this time the next vehicle groups will begin their transition to battery electric alternatives, with the next round of pilots launching for vehicles identified for Phase 3. During this time the City's charging needs will exceed the available capacity at its fleet depot, necessitating electrical infrastructure upgrades. This significant investment should be sized accordingly to the portion of the fleet being electrified and any additional hydrogen fuel cell analysis should be completed before proceeding with any major infrastructure upgrades.

Phase 3 is ten (10) years long from 2030 to 2040. During this time all remaining assets (vehicular and equipment) will need to be transitioned to zero-emission technologies. Actual progress should be compared to planned progress to understand any shortfall in meeting the 2040 net-zero emission goal. In particular, the rate at which the electrical grid decarbonizes will have the largest impact on reducing emissions.

8.2.1 Recommended Carbon Migration Strategy Roadmap (Phases 1, 2, and 3)



Phase 1	Phase 2	Phase 3
• Begin grant/funding applications. • Implement PHEV and BEV for General Purpose Vehicles. Implement HEV for Police and HD Vehicles. Implement BEV for the transit fleet. • Pilot BEV light-duty trucks, street sweepers, and refuse trucks. • Explore green fleet transition opportunities (public charging, on-demand transit, community targets). • Explore external partnerships and investments that would make FCEV technologies competitive with BEV.	• Review/update migration plan to review the competitiveness of hydrogen technologies. • Implement electrical utility upgrades/expansions. • Implement BEV for light-duty trucks, street sweepers, and refuse trucks. • Pilot BEV for remaining vehicles classes. • Expand market scan to remaining assets (equipment/construction/off-road).	• Review/update migration plan to review planned vs actual progress of the migration plan. • Implement additional electrical utility upgrades/expansions. • Implement BEV for remaining vehicles classes. • Implement zero-emission solutions for City equipment, construction, and off-road assets. • Review the progress of electrical grid decarbonization. Consider options to offset carbon should the grid fail to achieve carbon neutrality by 2035.

8.3 Implementation Opportunities

8.3.1 Continuous Improvements

Continuous improvement in the context of the City's Low-Carbon Migration Strategy is a mechanism to leverage opportunities, manage progress, and retain agility. It is understood that technologies and the City's services will evolve over the course of the plan, and adaptations should be expected. This will lead to a more sophisticated and financially viable action plan, representative of the future technology landscape.

The first mechanism for accomplishing this is to update the plan with the status of the transition compared to the planned progress. This should be performed for each activity listed on the roadmap, and subsequent subtasks developed in future implementation plans. An annual high-level assessment should be conducted, with a more detailed assessment at the end of each phase (in 2025 and 2030) and whenever a development arises that will significantly impact the execution of the plan. The high-level assessment should be aimed to monitor progress and identify solutions to problems that arise, while the more detailed assessment should be seen as opportunities to change the City's pathway more fundamentally towards net-zero emissions. Key questions to answer during each progress review include:

- Green Technology Adoption
    - Have green technologies been incorporated in the City's procurement plans?
        - Are there any outstanding vehicles in a vehicle group that face challenges being replaced? What alternative options exist for these vehicles?
    - Have vehicle pilot programmes failed to determine a viability zero-emission product to be incorporated into the fleet?
        - Are the piloted vehicles meeting the needs of the user groups? If not, what alternative technologies can be leveraged to make the implementation more feasible (Generators, larger batteries, alternative propulsion technology, larger fleet size, etc.)?
- Technological Progress
    - Is the pace of commercial deployments of green technologies keeping up with the City's forecasts in terms of meeting user group needs?
        - If the technology is behind, how does it impact other milestones and what risks does it pose to achieving the City's goals?
        - If the technology is ahead, should the City accelerate adoption and achieve net-zero emissions earlier than forecasted? How would an accelerated adoption impact other milestones?
    - Are alternative technology types, such as hydrogen fuel-cell, more competitive than forecasted?
        - What benefits and risks would be realized should the City incorporate the alternative technology?
        - How would the adoption impact other milestones and what risks would it pose to achieving the City's goals?
- Financial Performance
    - Are the CAPEX and OPEX projections aligned with the GFP forecasts?
        - If not, why?
            - An implementation opportunity was pursued which involved changes to the financial plan (ex. higher capital investment resulting in lower operating cost).
            - Changes to City services (level of service, vehicle mileage, vehicle count, fuel efficiency, etc.,)

- Alternative technologies were implemented more quickly/slowly
- Predicted procurement prices were above/below expectations
- Predicted fuel/energy prices were above/below expectations
- Infrastructure and equipment costs were above/below expectations
- Maintenance savings were above/below expectations
- Other unexpected costs

Regardless of the current plan, the City will need to continuously update its market scan of green technologies being released to the market. This will help keep the City informed of the development of emerging technologies such that they can be incorporated into procurement policies, particularly the City's "Greening Our Fleet" Policy. This is how the City will identify new products to pilot and how the selection of suitable technologies for vehicle replacement will evolve.

8.3.2 Implementation Opportunities

The implementation opportunities listed in this plan are a list of prospects that could be leveraged to improve the City's transition to green technologies. This includes identifying technical and financial efficiencies, risk mitigation opportunities, and supporting the City's broader goals.

8.3.2.1 Phased Infrastructure Implementation

Proper planning can ensure that preliminary steps are both rationale and scalable, guaranteeing the widespread ability to deploy BEVs on a larger scale on a go-forward basis while minimizing the disruption to operations. This can be accomplished by designing infrastructure to support the complete rollout and phasing in the equipment as necessary. Alternatively, space can be allocated in advance for modular infrastructure upgrades which can be additively incorporated into the City's operations.

The phasing of the infrastructure upgrades should consider the following:

- The infrastructure upgrades should align with the needs of the vehicles being procured.
- Infrastructure should be installed in quantities that benefit from economies of scale, while limiting the upfront cost of expansion.
- Allowances should be made for the infrastructure to be installed in a manner that minimizes disruptions to operations.
- The various impacts on employees during the construction phases should be understood and mitigated. This may include additional interim procedures that maximize safety while minimizing disruption to normal routines, and processes and procedures resulting from noise, dust, workspace encroachment, etc.

Particular attention should be directed to electrical conduit and cable runs that connect charging power control units to dispensers, which in turn charge the vehicles. Regardless of where the conduit and cable runs are located (i.e., trenches in exterior parking lots, floor slabs, or suspended from roof structures), the electrical conduit and cable runs for the charging infrastructure needs to be designed to limit operational impacts whilst allowing for effective maintenance, repairs, and upgrades. In the case of suspended cabling, it is recommended that the necessary reinforcement for the full build-out is performed at the prior to the deployment of vehicles.

8.3.2.2 Phased Tooling Implementation

Maintenance of BEBs requires specialized tools to service the more complex, high voltage electrical systems and components that are not found in conventional fuel vehicles. These systems include battery packs, inverters, electric motors, etc. Due to the high cost of the special tooling, more detailed consideration is warranted to determine the following:

- What is the scope of tooling required to meet the City's in-house maintenance needs?
- What existing tools and systems will need updating or replacement to serve the new vehicle types?
    - For example, hoist adapters may be required to hoist vehicles that don't have axles.
- What quantity of tooling will be required to support the adoption – from the initial adoption up until the City has completely transitioned?
- When will the tooling be required - ensuring that operations support is not negatively impacted?
- What systems will be in place to manage the allocation and control of the tools?
    - Will it begin with a shared pool of tools that transitions into individual tool assignments?
- What calibration and recertification requirements apply to the tools and related staff?

The battery-electric vehicle industry is experiencing short-term production and supply constraints as production lines for this new technology are deployed and ramped up to intended output levels. These constraints extend to spare parts required for vehicle maintenance, thus the City will need to expand its spare parts stocking levels to include parts that are unique to battery-electric vehicles. This will be inclusive of batteries, drive trains, and auxiliary systems. As the scope of the City's in-house maintenance activities evolves, so too will their needs for replacement parts.

8.3.2.3 Procurement Opportunities

As noted in the Green Fleet Analysis, the modelled external funding resources were limited to the funding streams that have already been earmarked for the City. Additional funding opportunities exist that the City should pursue, and if successful will further improve the business case for the transition. Some of these funding programs have windows of eligibility, meaning that only procurements made before a certain year can be claimed for funding. To maximize external contributions, the City may wish to procure replacement vehicles ahead of their planned retirement date, such that their replacement cost is eligible for grant funding. Doing so may also lead to additional benefits as the City will be purchasing vehicles in bulk, giving more leverage to negotiate for lower prices and secure production line build schedules.

As the City of Saint John is not the only municipality embarking on a transition to green vehicles there is an opportunity to partner with other municipalities in developing procurement agreements. This could take the form of an electric vehicle hub for municipalities to leverage their buying power and advocate for agreements that meet their needs, reduce costs, negotiate cost sharing agreements, and reduce risks through improved warranty terms.

In the short term, the battery electric vehicle industry is expected to continue experiencing production and supply constraints which have led to increased lead times between ordering and receiving a vehicle. The City should work with OEMs to understand the expected delay for various products and secure build slots on the manufacturer's production schedule to ensure vehicles are delivered as per schedule. When following a tendered procurement process, the City will need to be aware that delivery timeline will be a factor for comparing proponents.

The City will also need to update its "Greening our Fleet" policy, which includes the procurement of rental and leased vehicles. The emission reduction elements of the policy are limited to reducing idling and long-hauling. This policy should be expanded to explicitly evaluate technology type when renting or leasing. In the short term, the policy could prioritize renting hybrid vehicles so long as they meet the duty-cycle requirements. In the long term, the City should prioritize zero-emission vehicles as they become available for rentals and leases, so long as they meet user group performance requirements. Beginning in 2040, the policy should require that all rental and leased equipment are zero-emission.

The City will need to review its other policies and documents to align them with new considerations relevant to battery electric vehicles. The library of standard vehicle and equipment assets specifications is one such example. This library retains a database of general specifications to identify the basic common

items required for each class of vehicle and equipment assets. As new technology groups are incorporated into the fleet the library will need to be updated – with obsolete items being phased out.

If possible, the City should begin its battery electric deployment with plug-in hybrid (PHEV) models. These will help introduce battery electric technology as the vehicles operate entirely on an electric drivetrain until the battery is depleted. The benefit to the plug-in hybrid is that staff anxieties regarding range should be mitigated, as once the battery is depleted the gasoline engine is engaged and the PHEV drives much like a conventional hybrid vehicle. This will provide a safe space for staff to experience the strengths and limitations of the new technology. However, it should be noted that many OEMs are discontinuing plug-in hybrid production in favour of pure battery electric products which could result in the City missing an opportunity to procure this vehicle type. Additionally, the City will need to consider the maintenance impacts of procuring a discontinued product. The City should weigh the benefit of introducing staff to the new technology using plug-in hybrids when considering whether or not to proceed with their procurement. Starting in 2023, the green fleet plan prescribes that all new procurements for the Class 1 general purpose vehicles are expected to be battery electric products.

8.3.2.4 Electrical Optimization and Resilience Opportunities

The critical component for reducing the City's electrical utility bill throughout a battery electric vehicle adoption will be minimizing the monthly peak power demand – the maximum rate at which electricity was pulled from the grid. The City's monthly peak power demand incurs a direct monthly fee based on the magnitude of the peak. The City also pays for the energy consumed, the volume of electricity used to operate devices and recharge batteries. However, the rate at which the City is charged for energy increases in relation to the monthly peak power demand. This means that the monthly peak power demand impacts the electrical utility fees directly and indirectly. Beyond the electrical utility fees, the peak power demand will also impact the sizing of the infrastructure required to accept the power from the grid. The impacted infrastructure includes the transformer(s) and switchgear, where the larger the peak power requirements, the larger the capital and maintenance costs.

For all of the reasons above, limiting the peak power demand through optimization will allow the City to reduce its costs while increasing its resiliency.

Starting with optimization, the first and most important piece is to optimize how much charging is being performed at one time. Quickly charging the whole fleet at one time leads to very high peak power demand. Meaning that the City should seek to sequentially charge its fleet over a longer period of time or limit the rate of charge. It is sometimes impractical for fleets to recharge throughout the day, as they are needed on site performing their functions. This means that the window for charging optimization exists between the end of one day's operation and the start of the next. For fleets with well understood duty cycles, like transit, the magnitude of charging can be specified to take advantage of the entire charging window. For more ad-hoc operations, the charging equipment will need to be specified to meet the user group's needs for recharging, which are more difficult to optimize for.

Beyond optimizing the charging scheduling, the City can invest in energy storage and/or generation. The storage of energy is typically accomplished using a battery energy storage system (BESS). The BESS allows the City to withdraw energy from the electrical grid when its power demand is below the monthly peak. Later when the vehicles begin to charge, the energy is dispensed from the BESS, offsetting some demand that would be placed on the grid. This process is referred to as "peak shaving" as the BESS is providing energy at the time that it is needed, lowering the peak demand for charging.

The energy generation component is similar in that electricity is created on-site when it is needed, which helps to lower the peak demand, by an on-site generator which can be fuelled, by diesel, CNG, or other combustibles. If this is chosen as a long-term solution, the City should investigate products that accommodate low- and zero-emission fuels: biodiesel, renewable diesel, renewable natural gas, hydrogen.

Alternatively, the on-site generators may exist in the form of renewables, commonly solar. The limitation of renewables is that energy availability cannot be planned, rather it depends on weather. For solar the problem is more fundamental, as most of the charging will occur overnight when no solar energy is available. For this reason, renewable on-site generation is best paired with a BESS, so that the energy can be stored whenever it is available and can be drawn upon as needed. Solar PV arrays and BESS have their limitations as the power generated with solar PV arrays will likely account for a small portion of the energy requirements of a BEV fleet, and in the case of BESS's once they have been discharged to charge a BEV, they need to be recharged, which typically takes several hours. Relying solely on solar energy during an emergency is impractical.

Installing on-site energy storage and/or generation allows the City to add resiliency to its operations. If there is ever an unexpected interruption in the electrical grid, whether that be from a black-out or an equipment failure with the City's transformer, the City will have alternative energy available to it. Using a generator would allow the City to recharge its most critical vehicles at any time. Similarly, the BESS can hold a reserve amount of energy to be accessed in the case of electrical service interruptions. Depending on the length of the interruption, the City will be able to decide whether to continue normal operations or limit itself to more critical services.

8.3.2.5 Electrical Utility Opportunities

The electrical utility for the City is Saint John Energy (SJE), a subsidiary of the City itself. This creates more avenues for collaboration than many Cities throughout Canada. However, it is important to note that the bulk of the electricity provided by SJE is purchased from NB Power, which limits SJE's ability to alter the rate structure.

The first electrical utility opportunity that may benefit the deployment of battery electric vehicles is the introduction of an EV charging rate. These charging rates have been implemented in a variety of forms throughout Canada and is being explored for implementation in New Brunswick. If an EV charging rate is implemented, it could take many different forms. The most common form is a tariff window, where the price for consuming electricity is reduced for a period of time each day, generally overnight. Other frameworks could be a flat fee reduction based on type of use, or a separate rate class being created to cater to the needs of charging stations.

Another method to reduce cost could be through entering a charging as a service (CaaS) agreement. This could be done with the utility, or with a private partner. CaaS agreements serve to contract the installation, maintenance, and operation of charging equipment to an external party. This can include capital investment contributions from the CaaS partner, which are recuperated from the service fee. Some fees are charged based on energy consumption, however CaaS arrangements have been explored which would charge fees based on the mileage of the charged vehicles. Regardless of the specifics of a future CaaS agreement, it could limit the City's needs to hire staff that can maintain the specialized charging equipment, while offloading risk to the CaaS partner.

Collaboration with SJE will be critical to understand the long-term forecast for future power needs at City operation and maintenance facilities. This will aim to ensure that the electrical grid's capacity meets the City's electrical infrastructure demands. Communicating the needs of the full buildout will help the utility provider in developing their capital plans including scheduling of infrastructure upgrades.

If the City pursues the deployment of utility grade batteries as part of a BESS, SJE has communicated its interest in accessing the BESS capacity to add resiliency to the wider electrical grid. This would allow SJE to better manage the grid load during peak times. This potentially beneficial as the times in which the City would be best served accessing the BESS capacity is different from the times most beneficial to SJE. Many opportunities for mutual benefit exist depending on how the agreement is structured. For instance, the capacity made available to SJE could also vary with the season based on energy needs of the City's fleet,

thus allocating more or less capacity to SJE dependant of the circumstances. An agreement to share BESS capacity with the utility could generate additional revenue for the City while adding resiliency.

8.3.2.6 Fleet Opportunities

There are many benefits to incorporating battery electric vehicles into the City fleet, but the technology is not without weakness. The public fleet's need for fast charging will need to be investigated through pilot deployments to best understand the scale of infrastructure required to operate in the City. This supporting infrastructure will likely take the form of recharging sites throughout the City's service area, however additional charging locations may not satisfy all user group concerns regarding battery electric vehicles.

A notable limitation of battery electric vehicles compared to diesel or gasoline is the difficulty to idle for long periods of time. This may require the City to incorporates new equipment, such as portable generators capable of providing additional energy on-site when long periods of idling are necessary. This could be used to power the ancillary tools and lights or used to recharge the electric vehicles themselves. An alternative to a portable generator could be portable battery, as it could fulfil the same role of providing energy on-site. These generators or battery systems could be integrated into a new class of vehicle that is used to offset the weaknesses of the new technology, without significant fleet expansion.

Other changes may be incorporated at the service delivery level. One such example is the creation of an on-demand micro transit fleet, which would offset the needs of the existing transit fleet. This could allow more energy efficient vehicles to provide the same level of service to the community, which would reduce the overall electrical needs. In the event of a service change, the City will need to re-evaluate its energy needs. In doing so, additional savings may be realized as the refined infrastructure requirements are reduced.

8.3.2.7 Community Emission Goal Opportunities

The infrastructure being deployed for City operations may be leveraged to help the City in achieving its broader climate goals. Once such opportunity would be to make some charging infrastructure available for public use throughout the day. This would support community electric vehicle adoption with limited impact to City operations as the bulk of the charging is likely to be planned for the overnight period. Alternatively, separate chargers could be installed that are dedicated for public use, which could leverage the infrastructure installed for City charging. Again, this opportunity is particularly effective because the City's electrical capacity will generally be planned for overnight periods, when the fleet has returned from its regular operations.

Beyond supporting community electric vehicles, there is also a marketing opportunity to show that the City is a leader in climate change mitigation. Not only in reducing greenhouse gas emissions, but in reducing noise pollution and improving air quality. These improvements can be targeting in communities to improve social and environmental equity. This can be targeted with through the deployment of battery electric vehicles in communities where air and noise pollution, racial, socioeconomic disparities are greatest whist also balancing the challenges of new technology. An example of which would be to allocate electric buses to routes that begin early in the morning or late at night, to reduce the community impact of the noise generated by the diesel alternatives.

8.3.3 Piloting Programs

Piloting vehicles before committing to their deployment can add value by creating familiarity with the technology. This includes understanding how successfully it can perform its required duty cycle, identify opportunities to leverage its strengths, identify weaknesses that need solutions or changes in service delivery, and refine the procurement strategy, rate of conversion and charging options to be implemented

to better meet the City's needs moving forward.

Piloting is recommended for all vehicle groups except for Class 1 general purpose, as it is understood that user group needs can be met with existing technologies. This is far less understood for the remaining vehicle groups which have more strenuous duty cycles. For this reason, piloting programs are suggested to evaluate how new products perform when tasked with the City's duty cycles.

This is important as climate conditions can have a significant impact on the performance of battery electric vehicles. Using piloting programs, the City will know the limitations of the products and be able to develop solutions for any identified shortcomings.

8.3.3.1 Key Performance Metrics

The recommended key performance metrics to monitor during pilot testing include:

- Utilization – how many kms are driven
- Availability – number of days ready for service
- Infrastructure availability – number of days ready for use
- Vehicle availability – Mean distance between road calls
- Charger reliability – Number of days unavailable for use – warranty issues
- Cost per km – Energy costs per km driven collated to fuel cost savings
- Environmental Impact – Emissions reduction, value of carbon savings
- Equity and Environmental – Kms driven through these areas

8.3.3.2 Phase 1, 2, and 3 Pilots

The roadmap currently recommends piloting the vehicle groups and equipment in the following phases.

Phase 1	Phase 2	Phase 3
• Class 2 – Light Duty Pickup Truck • Class 7 – Streetsweeper • Class 8 – Refuse Truck	• Class 1 – Police Cruiser • Class 3, 4, & 5 – Heavy Duty Pickup Truck • Class 6, 7, & 8 – Heavy Duty Truck Platform • Class 8 – Pumper Fire truck	• Excluded asset classes: construction equipment, armored vehicles, etc. • Pilot zero-emission tools and equipment (Optional)

8.3.4 Staff Readiness

The next step in preparing City staff for incoming changes is to establish a broad communication strategy, as it is important to get buy-in at all levels – both within the organization and externally.

This should outline stakeholder relationships, and how they should be consulted and informed throughout the transition. Champions for change should be identified in each user group, who can act as a first point of contact in addressing questions from their group.

Discussion with user groups regarding transition and phasing strategies are essential to initial planning, ensuring that all stakeholders within operations (operators, maintenance, facilities, planners, schedulers, and first responders are included in the process.

This can be achieved using engagement (or "outreach") teams to foster a positive environment for change. Some elements to focus on when communicating with stakeholders include:

- Engagement – relationship and trust building

- Outreach – sharing of information, education and awareness through community town halls, social media, in garage pop-ups, and surveys
- Involvement/Collaboration – Engage stakeholders in the engagement sessions, design, planning, roll-out phases
- Input – Seek and evaluate feedback from stakeholders, public, communities

8.3.4.1 Labour Negotiations

A large portion of City staff are members of various unions with which the City will need to include due to the large role they will play in the success of the BEV transition and implementation, and also negotiate to refine job descriptions and classification. This will be a result of necessary alterations to employee roles following the adoption of battery electric vehicles. These alterations extend to all new responsibilities assigned to drivers/operators, mechanics, and service staff, most if not all of which will require adjustments to the existing labour agreements. The following list outlines a range of upcoming changes that will need to be considered by all parties involved in negotiations:

- New necessary certifications
- New staff classifications
- Revised compensation structures
- Changes to standard operating procedures
- Changes to vehicle, equipment, and infrastructure maintenance activities

The City may also enter service agreements with third party contractors to provide operations and maintenance services applicable to battery electric vehicles and their supporting equipment. One example presented in the Implementation Opportunities section is charging as a service (CaaS). Under this arrangement, it is possible that the third party maintain ownership of the charging equipment and be responsible for all related maintenance activities to facilitate an agreed upon level of service.

8.3.4.2 Training Program Development

The City will need to develop multiple training programs to ensure that each staff segment knows the changes that will impact them as battery electric vehicles are adopted. Safety concerns will apply to all staff working in proximity to battery electric vehicles and their associated infrastructure and equipment. Familiarity with battery electric technologies should not be assumed as common knowledge among staff, so it is expected that staff will have many questions about how the technology works and how it will impact their roles.

As a result of these considerations, the following training elements should be incorporated into City training programs.

- All Staff – Electrical Safety
    - High voltage safety procedures
    - Lock Out – Tag Out
    - Casualty rescue – Sheppard's crook
    - Personal Protective Equipment
- Battery Electric Vehicle Operators – Vehicle Orientation
    - Vehicle familiarity – switches, controls, indicator/warning lights gauges, etc.
    - Battery SOC
    - Remaining operating time / estimated range
    - Start up and shut down procedures
    - Driving characteristics (regenerative braking, acceleration, etc.)
    - Depot charging protocols

  - Enroute charging protocols (for applicable vehicles)
- Mechanics/Auto-body/Welders – Knowledge and Skillset Training
  - Preventative Maintenance
  - Electrical/electronic
  - Multiplex system
  - Electric drive/transmission
  - Inverters
  - Batteries and energy management hardware & software
  - High voltage
  - Startup – shutdown procedures
- Service Cleaners
  - Charging and fuelling auxiliary heaters
  - Depot charging protocols
  - Overnight parking configurations and procedures
  - Pressure washing vehicle undersides
- First Responders and Utility Workers – Response Measures
  - In the event of an accident
  - Thermal event
  - High voltage and chemical factors

8.3.5 Facility Modifications

Battery electric vehicles are different from existing technologies in a number of ways that require consideration and potential facility modifications. Unit level differences between vehicle types include added height and weight. The fuelling requirements of battery electric vehicles extends to new specialized infrastructure. These needs should be incorporated into the facility layout, as the act of recharging requires more space time than refilling a gasoline or diesel fuel tank. Furthermore, the added maintenance considerations involve both specialized tooling and spacing requirements that may necessitate new layouts and space allocation/reallocation to limit conflict between workspaces.

8.3.5.1 Vertical Clearances

The increased height of battery electric vehicles is a result of the vehicles being designed to accept overhead charging, necessitating the installation of overhead rails and the full-length fairings for aerodynamics and protection of the roof rails. The roof fairings and charge rail structure add between 10 and 12 inches (25- 30cm) to the height of battery electric vehicle compared to their gasoline of diesel equivalent. Transit buses will the tallest vehicle in the City fleet after receiving overhead rails, meaning that vertical clearances in the depot can be sized accordingly. Accommodating overhead rails on a bus increase the vertical profile from 10’2” to 11’0” (3.1 to 3.4 metres). Currently the garage doors, necessary to access maintenance, servicing, and the facility at large vary in size, with the lower clearance accommodating vehicles with heights up to 13’1” (4.0 metres) which is sufficient for battery electric buses. Furthermore, the doors at the City’s depot have the ability to be adjusted several inches higher to provide even more clearance if desired.

In terms of the main vehicle storage area, the existing clearance between buses and the overhead structure is 5’4”. This is sufficient space to accommodate the additional height of the overhead rails and shroud. Additional investigation will be required to confirm whether overhead pantographs can be mounted overhead, however in the absence of unforeseen engineering constraints, the existing space should be sufficient.

In the and maintenance areas the clearing from the top of vehicles and lowest point of the ceiling

structure must consider the height of the vehicle when hoisted. The clearance of existing buses when hoisted is 4'5", which is sufficient to accommodate the added height from the overhead rails and shroud.

Once piece of equipment that will need to be modified for taller vehicles is the City's wash bay. The device washes the exterior of buses each time they return to the depot. The required modifications are twofold. First, the existing overhead clearance will not accommodate the additional height of the vehicles. Second, the washing is limited to side jets, whereas overhead rails required overhead washers to enable proper cleaning. The equipment will need to be modified or replaced such that both of these needs are accommodated.

8.3.5.2 Electrical Infrastructure

Given the high-power requirements for the charging equipment necessary to support battery electric vehicles, the City will need to upgrade its electrical infrastructure. This begins with an upgrade to the existing transformer to accept more power from the grid. Once the power is transformed it will need to be processed through an electrical room with switchgear necessary to accept that increased capacity. This power will then need to be routed to the charger power control units via high-voltage (HV) cabling.

Additional infrastructure will be necessary should the City elect to pursue on-site energy storage and/or generation as the infrastructure will need to accommodate a higher peak power load. These additions are recommended as they will allow the City to employ peak shaving strategies (reducing maximum draw from the electrical grid) and provide resiliency in the case of an electrical service disruption. In the case of fuelled generators, fuel storage will need to be developed on-site to enable their function (existing fuel storage may be repurposed to serve this function).

8.3.5.3 Candidate Power Control Unit Locations

For the purposes of high-level planning, charging equipment can be thought of as having two components. The first is the power control unit (PCU) which accepts energy from the grid and directs it to dispensers. The PCU have flexibility in their location, so long as they can be connected to their dispensers. Generally, the maximum range for this connection is 150 metres. The second component is the dispenser, which uses a connector to physically attach to the vehicle charging port. Depending on the equipment selected, one PCU can power multiple dispensers simultaneously or sequentially.

All the locations where dispensers are installed will nearby PCUs to supply the energy This charging infrastructure should be in areas which limit risk of vehicle collision and other damage, while remaining accessible to maintenance staff. Furthermore, the systems release a large amount of thermal energy when in use which requires excess heat be vented or repurposed for use elsewhere in and around the facility.

An ideal location for centralized PCUs at the City's depot is the mezzanine above the mechanic offices and lunchroom. The underutilized location is set adjacent to both the vehicle storage and maintenance area. The modifications necessary to use this location includes strengthening the mezzanine to bear the increased load, and to connect the location to the electrical room. Following the ceiling and parking lanes from this location, the distance to the furthest corner of the storage area is 100 metres, enough to accommodate the connection between PCU and dispenser.

An alternate location for centralized PCUs is the mezzanine above the tire storage area. The underutilized location is less ideally located to serve the vehicle storage area but is adjacent to several maintenance bays. Similar to the location above, the modifications necessary to use this location includes strengthening the mezzanine to bear the increased load, and to connect the location to the electrical room.

8.3.5.4 Primary Dispenser Locations

The primary location for charging activities will be the vehicle storage area, such that the fleet can benefit

from overnight charging. In the vehicle storage area, plug-in dispensers installed for charging will occupy space that would otherwise be available for vehicle storage and circulation. Beyond their footprint, dispensers also have access requirements as staff will need to attach dispenser connectors with vehicle charging ports to begin refuelling. Dedicating storage space for charging infrastructure and its use will result in lower vehicle storage capacity. The amount of floor space required for charging infrastructure, and allowing access to it, can be reduced by opting to use overhead infrastructure such as pantograph charging equipment or the overhead storage of plug-in charging dispenser units. Both ground level and overhead storage approaches will require high-voltage (HV) cabling to connect dispensers with their chargers, however placing the dispensers and HV cabling overhead can mitigate the inherent safety risks in placing them at ground level with circulating staff and vehicles.

The degree to which overhead charging infrastructure can be implemented will depend on the existing structural capacity to support the increased load and whether structural upgrades can be employed to meet any capacity shortfall.

Lanes dedicated to charging should alternate with flow through lanes to allow vehicles to access charging as required. The charging dispensers should be rated for 150kW to meet the needs of larger vehicle classes. Early in the transition this will be limited to buses, however it will expand to include truck platforms and other heavy apparatus.

An overhead fast charger should be considered to provide the City with more operational flexibility. This could be located in the wash lane or in an exterior area that will not conflict with storage area circulation.

8.3.5.5 Auxiliary Dispenser Locations

Charging dispensers should also be installed in maintenance and service bays to ensure that vehicles do not find themselves stranded with depleted batteries. The charging equipment in these areas can be much smaller than those in the primary charging area as the vehicles only need to be able to maintain functionality – rather than needing a full state of charge to operate their entire duty cycle.

The location and number of chargers suggested are as follows:

- Body Shop: two (2) to three (3) dispensers.
- Pit Bay: two (2) to three (3) dispensers.
- Repair Bays: three (3) to six (6) dispensers.

The variance in the number of dispensers is a function of whether they can be shared between bays and whether they are AC level 2 or DC fast chargers. Using AC level 2 chargers would warrant a one-to-one deployment of dispensers to bays, whereas DC fast charging dispensers have enough power to sustain multiple bays. Whether one dispenser can serve multiple bays will depend on the specific layout of the equipment and the charging port location of procured vehicles. An additional consideration for these auxiliary locations is that they may require standalone PCUs if cable runs from the primary PCU area are too long.

8.3.5.6 Static Free Workplaces and Storage

Maintenance of some electric vehicle components require that they be conducted in a static free environment. In particular the batteries, the costliest vehicle component, can be significantly damaged by undesired electrical discharges. Static free precautions must be inclusive of the maintenance tools and equipment as well as the spaces dedicated to their storage.

Currently the City's depot does not include any static free workspaces or equipment meaning that existing space dedicated to vehicle maintenance will need to be adapted. One such adaptation will need to be the inclusion of an electronic repair lab where electronic diagnostics and repairs can be conducted. This should be inclusive of all repair processes from component disassembly to reassembly. A potential

location for this is the engine rebuild room that could be repurposed as diesel engines are phased out of the fleet. The extent to which these locations are required will be dependent on the scope of maintenance activities that the City decides to perform in-house.

The storage of sensitive electrical components is similar in that the space needs to be controlled such that the items are protected from unplanned electrical discharge. One approach to this need is just-in-time delivery for batteries rather than stocking them in inventory. This can be accomplished through service-level agreements with OEMs which make them responsible for maintaining the inventory and providing a timely delivery pipeline.

8.3.5.7 Staff Spaces

A dedicated training room for the maintenance staff may be considered in the project to build more office space in advance of the public fleet's relocation to this facility. This could be served with additional multipurpose spaces throughout the facility. These multipurpose spaces may primarily be used for training purposes, but their flexible nature provides the City with flexibility in how to operate. One example would be to repurpose the room to function as a lunchroom should Covid restrictions be reintroduced as this would provide space for social distancing: 6 feet between individuals, limited seating per table, etc.

The City will need to determine how many staff members will be relocated to the depot, as a significant migration of staff may necessitate more significant expansion than initially planned.

Staff spaces extends to the areas dedicated to personal storage. The existing locker room is currently limited in space for the existing staff. Should the staff count be expanded and/or staff need to maintain multiple sets of PPE for working on a fleet of mixed technologies the personal storage space may need to be relocated and expanded.

8.3.5.8 Additional Modifications

The maintenance of battery electric buses requires that mechanics be able to access the roof of the vehicle to perform certain maintenance activities. This could be accomplished at the City's depot in two ways. First a portable or fixed maintenance gantry platform could be acquired. This would allow mechanics to ascend stairs onto an overhead platform, from which they would have access to the roof of the vehicle. When using a portable or fixed gantry it must span the length of the bus plus on both sides to effectively mitigate the risk of staff falling from the roof.

An alternative approach would be to use the City's existing one (1) mobile platform and three (3) triangular 3-point platform ladders. The mobile platforms and ladders will require the City to install an overhead fall-arrest system to ensure that staff are safe working at height.

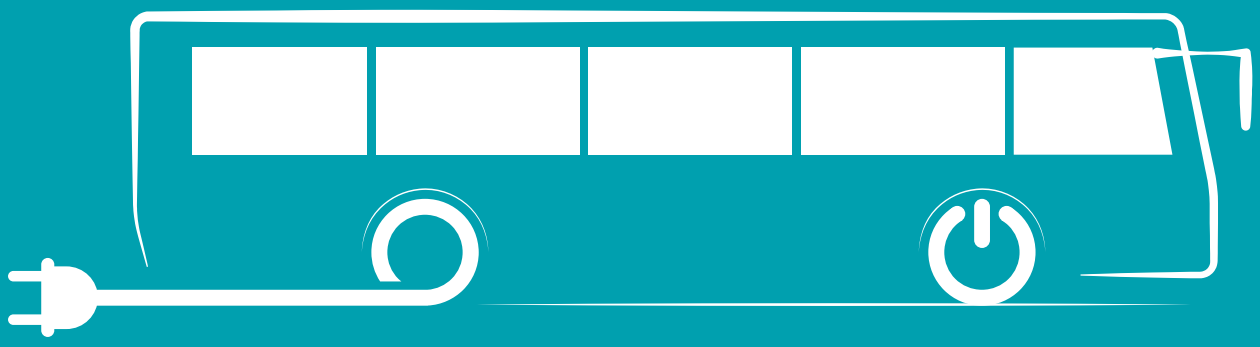
As zero-emission alternatives are incorporated into the fleet, there will be fewer diesel and gasoline vehicles. Equipment designed to support the gasoline and diesels will become less necessary up until they become obsolete. Throughout this process the City will be able to phase out old equipment. This includes exhaust hoses (located in the pit bay and paint booth), as well as the oil and lubricant dispensers located in the pit bay.

Appendix A

Green Fleet Plan Outputs

Appendix B

Transit Route Modelling
ZES Simulator Output



Appendix C

Site Visit Photos

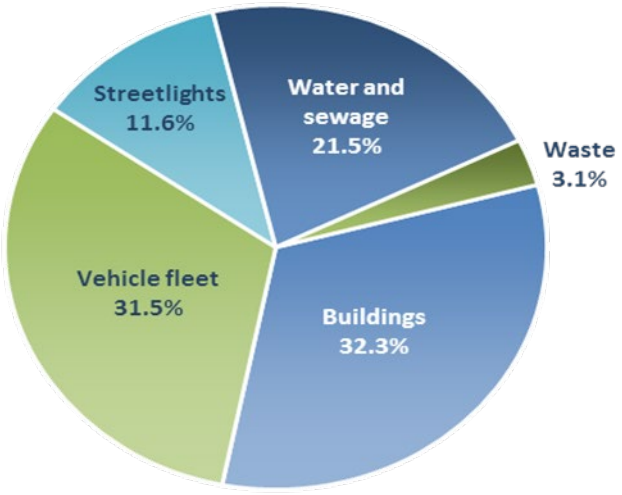


Presentation to Council
City of Saint John Public Transit and Fleet Low-Carbon Migration Strategy
April 19, 2022

SAINT JOHN

Corporate GHG & Energy Action Plan

- Approved Corporate GHG & Energy Action Plan
- Forecast Emissions: 16,643 Tonnes of CO2
- **GHG Reduction Target 30% by 2025, 2015 Level**
- **Long-term GHG Target Carbon Neutral by 2040**
- Fleet & Transit Strategy
  - Fleet Downsizing
  - Idle-free strategy
  - Public Transit and Fleet Low-Carbon Plan
  - Training & Education



SAINT JOHN

Current Progress

- Council Adopted the “Greening Our Fleet” Policy in June 2019
- Vehicle Replacement Strategy using Optimum Replacement Point (ORP)
- Fleet Telematics to track and monitor vehicles fuel consumption, efficiency
- Fleet Downsizing
- Engage Wood through RFP process to develop the low-carbon strategy
- Objective of the Strategy
  - Develop a pathway or roadmap to transition to a zero-emission fleet and public transit by 2040.
- Project is fully funded by ETF

Agenda

PART A: BACKGROUND

1) Goals of the Green Fleet Plan
2) Inclusions and Exclusions

PART B: INPUTS AND ASSUMPTIONS

1) Procurement Plan

PART C: RESULTS

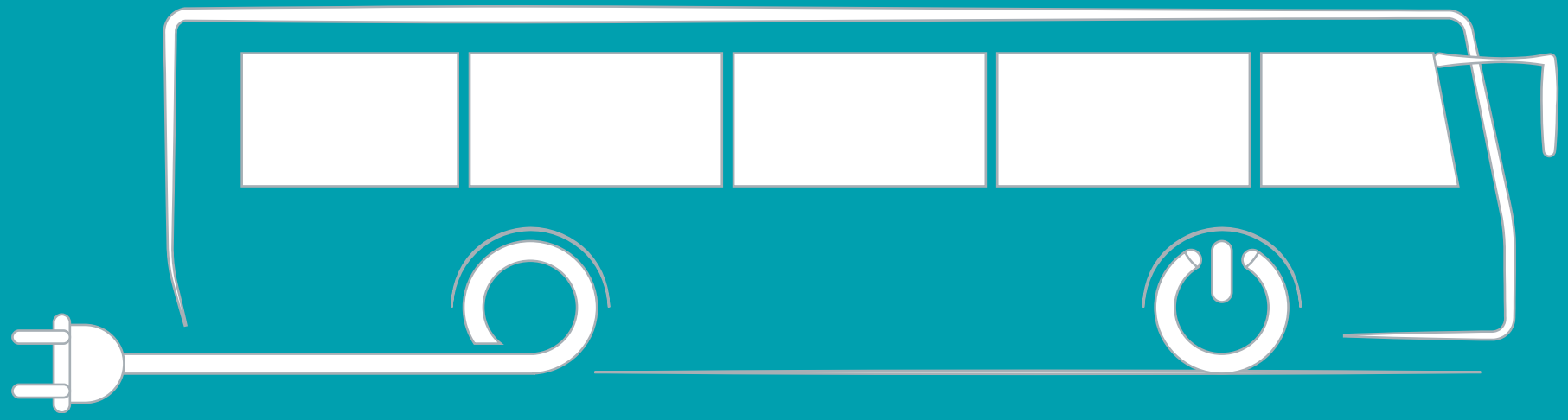
1) The best performing Scenario

PART D: RECOMMENDATIONS

1) Next Steps
2) High-Level Roadmap
3) Council Recommendations







PART A
Background

Goals of Low Carbon Migration Strategy

City of Saint John	2025 Emission Target	2040 Emission Target
Corporate	30% below 2015 levels	Carbon neutral



2021 Emissions are 36% below 2015 levels

SAINT JOHN

wood.

Goals of the Green Fleet Plan

Like for like comparison of the different pathways forward for developing the City's Carbon Migration Plan.

- Battery-Electric (BEV) or Hydrogen Fuel-Cell (FCEV)
- Incorporate Transitional Technologies? (Hybrids or CNG)

High-Level understanding of related CAPEX, OPEX, and Emissions.

- To be compared with qualitative factors such as risk, opportunities, and complexity.

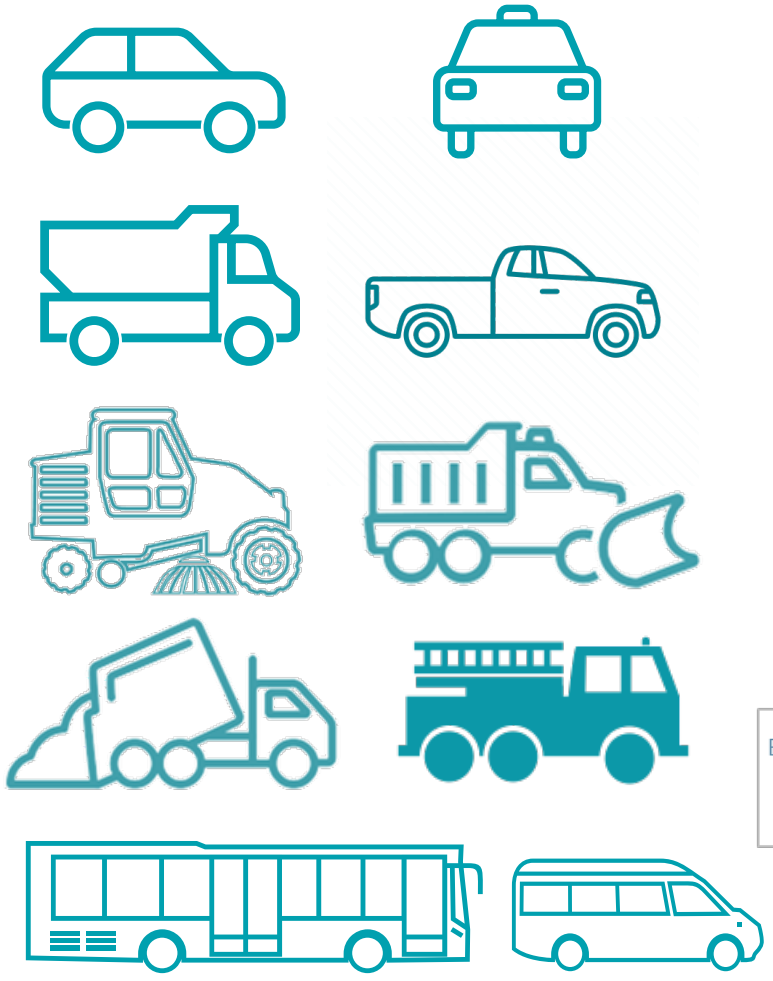




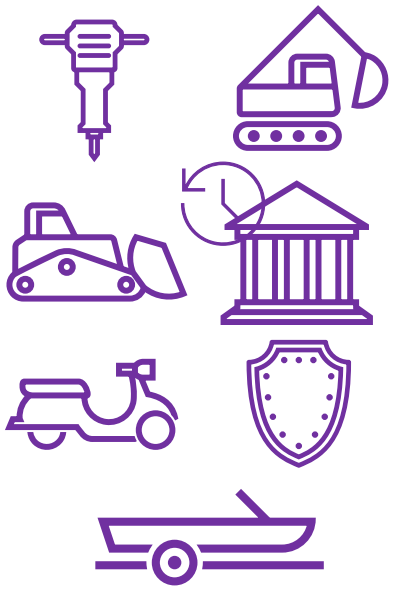
SAINT JOHN wood.

Inclusions and Exclusions

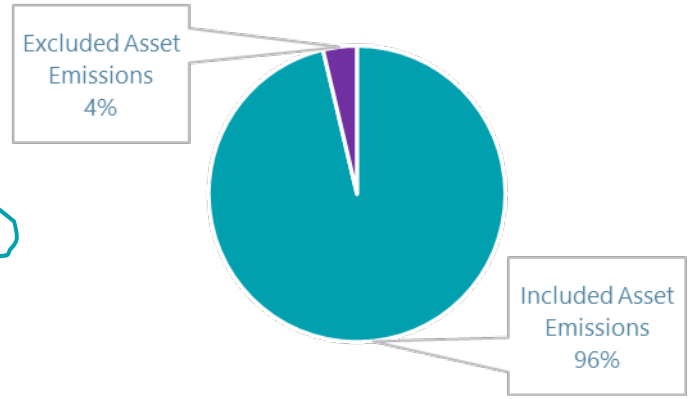
Vehicle Groups
Class 1 General Purpose
Class 1 Police Cruiser
Class 2 LD Pickup Truck
Class 3,4,5 HD Pickup Truck
Class 6,7,8 Truck Platform
Class 7 Streetsweeper
Class 8 Pumper Fire Truck
Class 8 Refuse Truck
40’ Transit Bus
28’ Transit Bus



Excluded Equipment
Construction Equipment
Historic/Museum Vehicles
Police Bikes
Non-renew Novelties
Boats
Generators



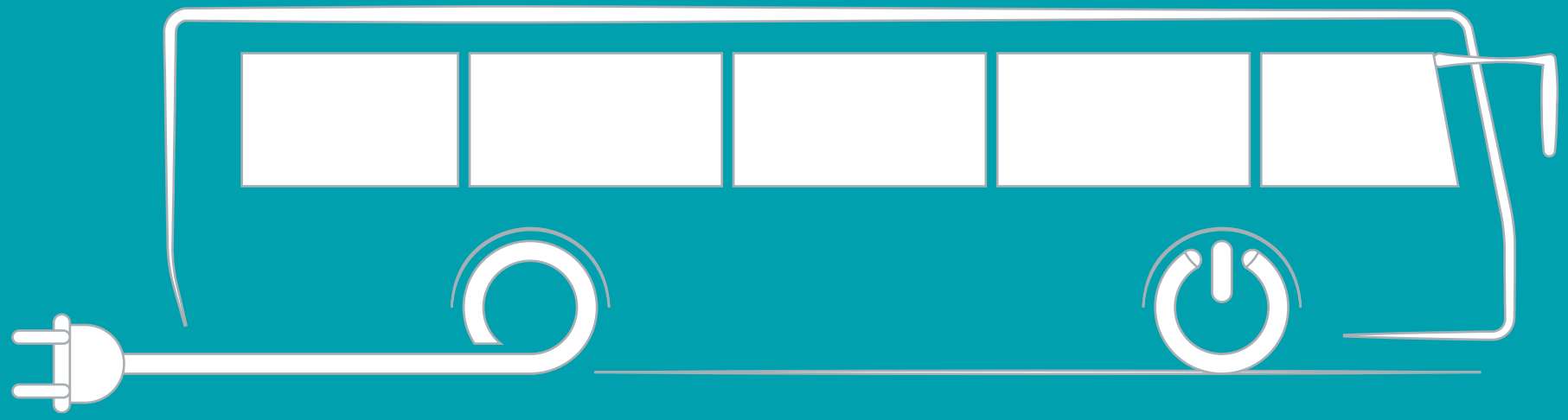
2021 Transportation Emissions



SAINT JOHN wood.

Examples of BEV Products

Vehicle Groups	Example Product	Image	Ready Date
Class 1 General Purpose	Bolt EV		2023 ①
Class 1 Police Cruiser	Mustang Mach-E		2030 ③
Class 2 LD Pickup Truck	F150 Lightning		2025 ②
Class 3,4,5 HD Pickup Truck	B2 (stand-in)		2030 ③
Class 6,7,8 Truck Platform	Lion8		2030 ③
Class 7 Streetsweeper	M4 BEV		2025 ②
Class 8 Pumper Fire Truck	Vector		2030 ③
Class 8 Refuse Truck	Lion8P		2025 ②
40′ Transit Bus	ZX5+		2023 ①
28′ Transit Bus	S1LF		2023 ①



PART B
Green Fleet Plan

Green Fleet Scenarios

1

Scenario 1
Business-as-Usual

2

Scenario 2
Battery Electric Vehicle (BEV)

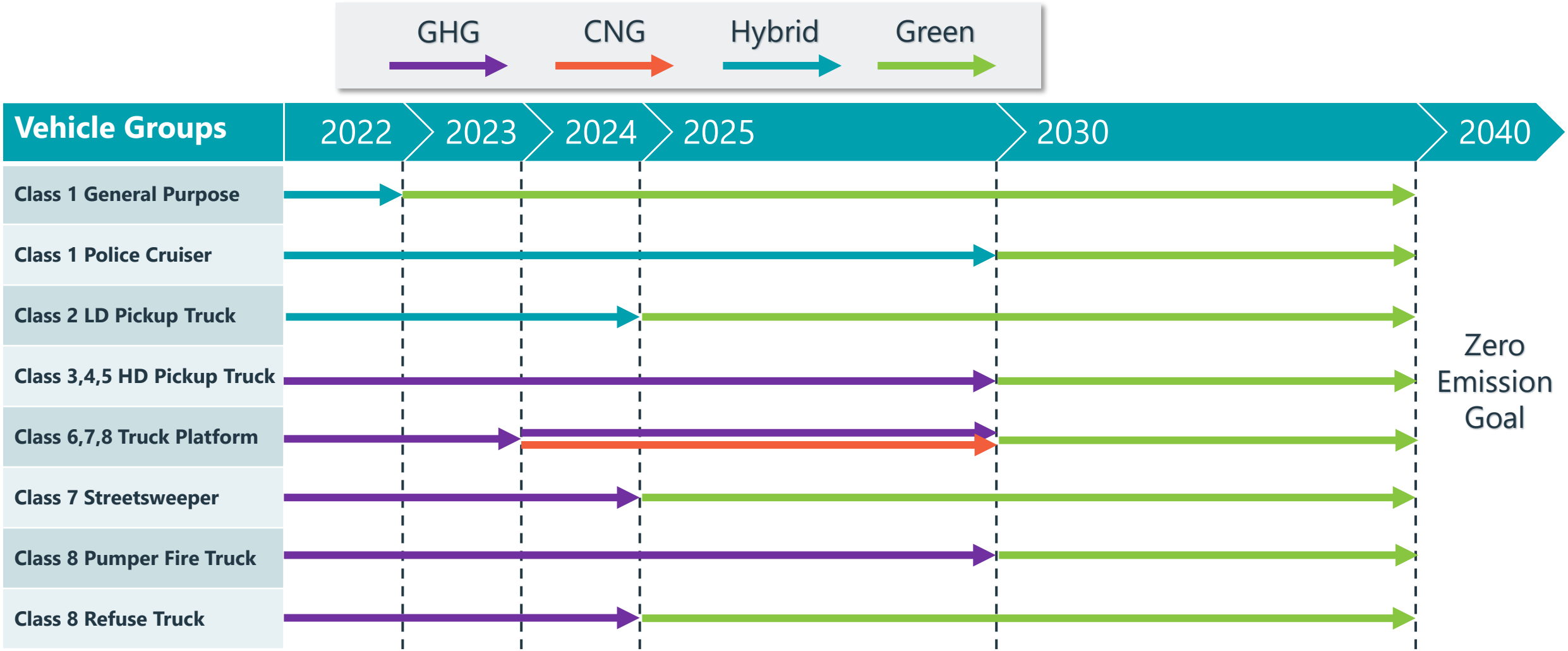
3

Scenario 3
Hydrogen Fuel Cell (FCEV)

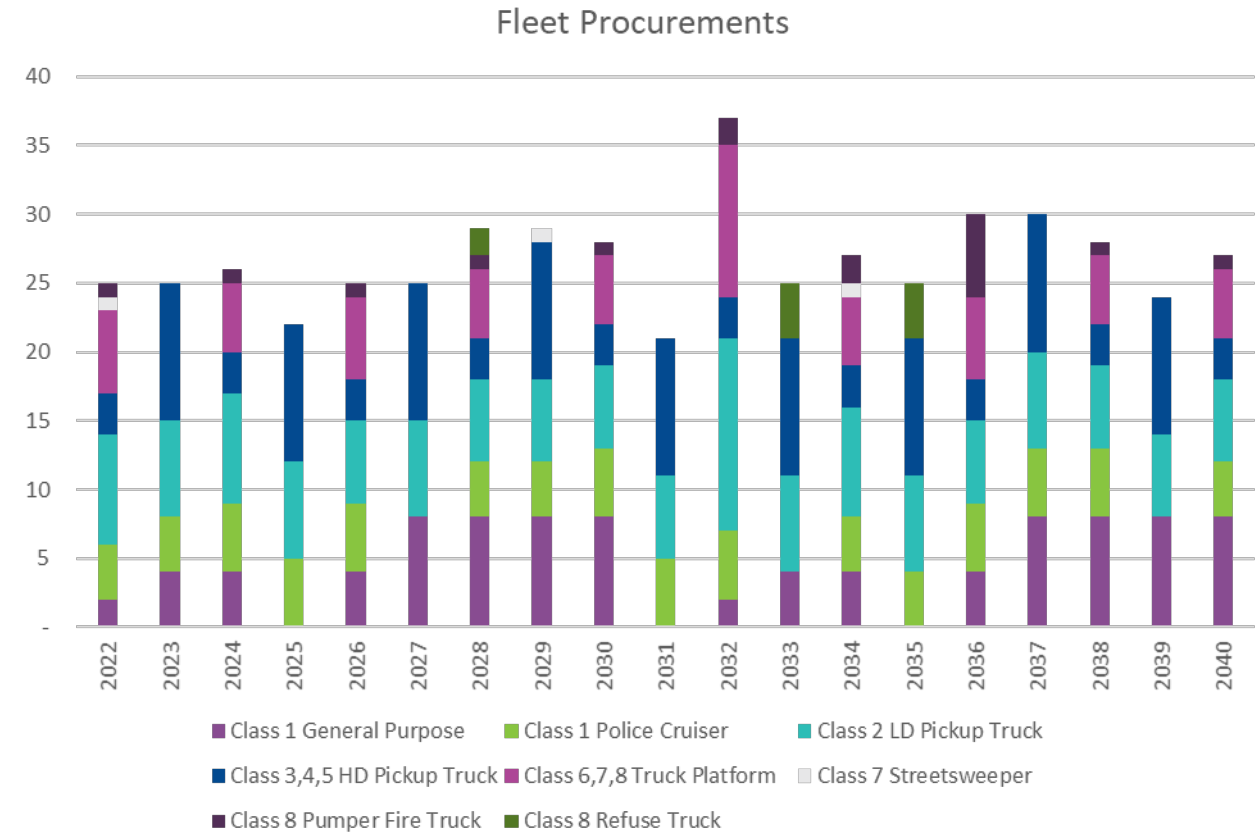
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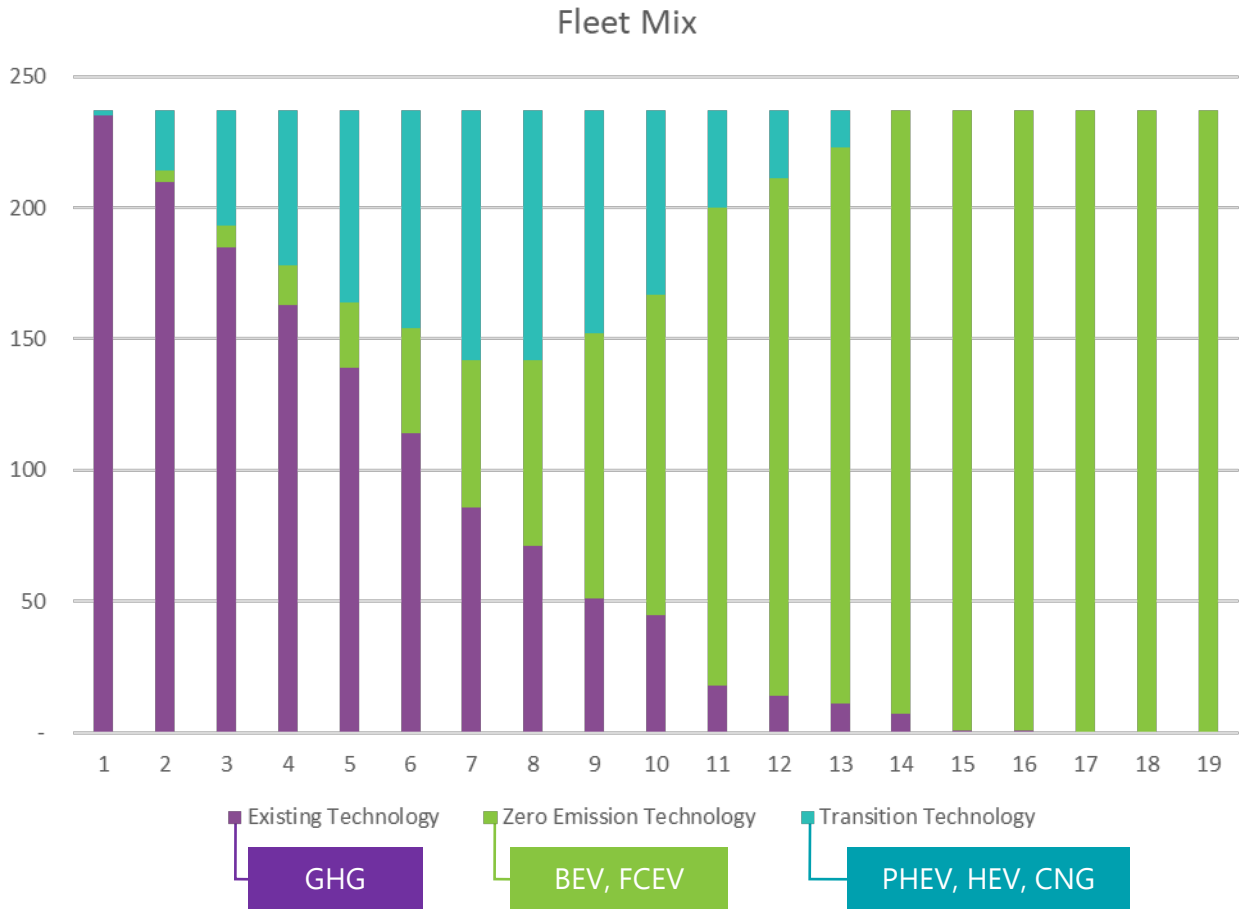
Scenario 4
CNG to BEV

Anticipated "Green" Procurements – Public Fleet

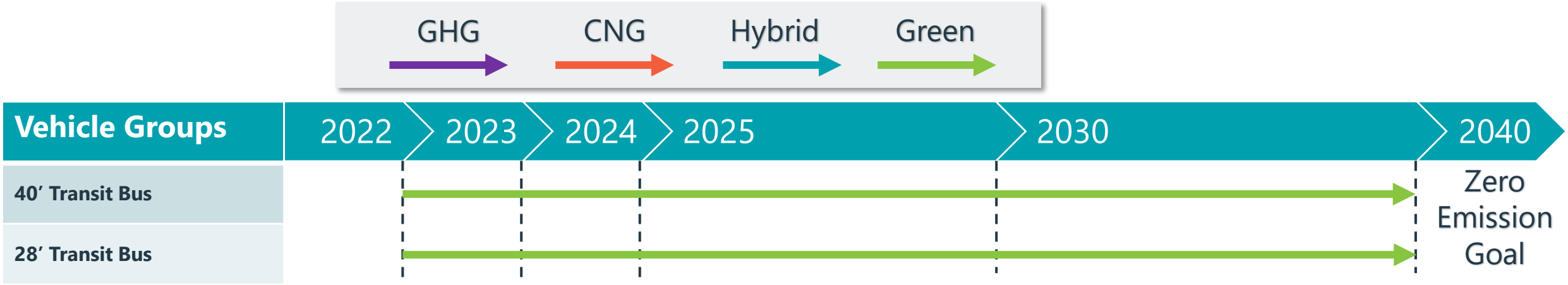


Procurement Plan – Public Fleet



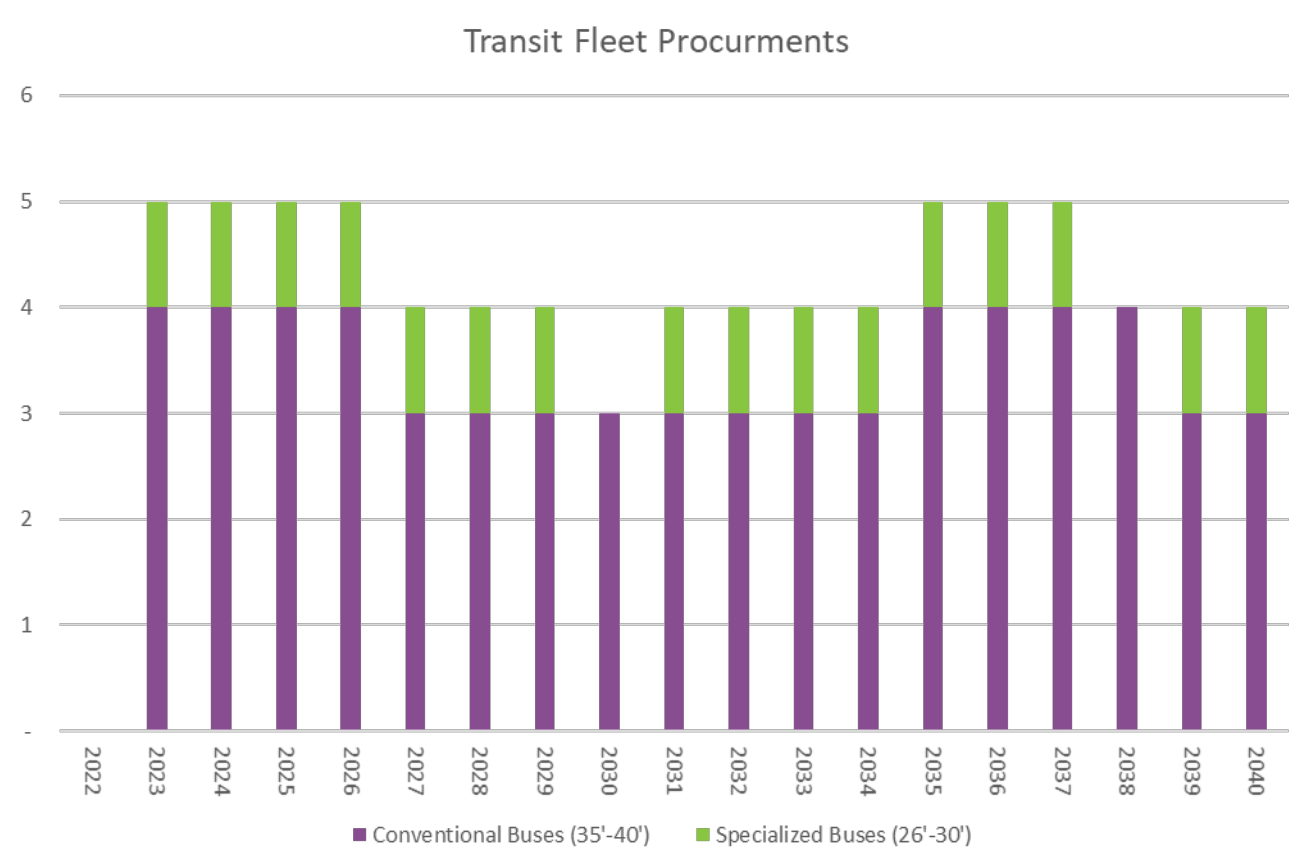


Anticipated “Green” Procurements – Transit Fleet

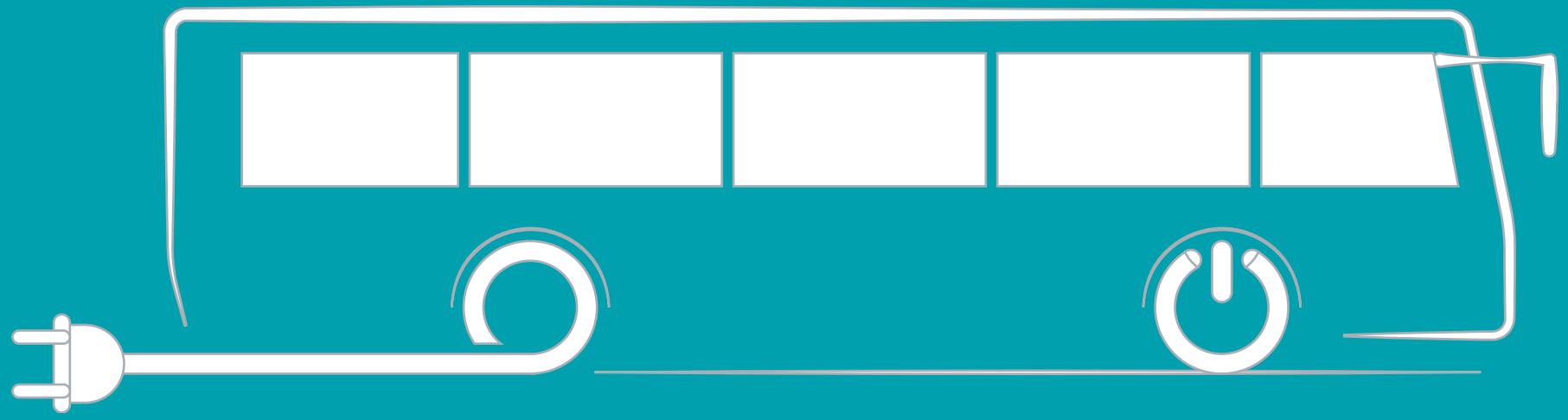


Note that 28’ Hydrogen Fuel Cell Buses (FCEB) are currently not available, though 40’ Hydrogen variants do exist. To maintain a like-for-like comparison, 28’ FCEBs are scheduled to begin in 2023, however implementation adjustments would likely be necessary should the hydrogen scenario be selected by the City.

Procurement Plan – Transit Fleet







PART C
Green Fleet Plan Results

Model Results

When comparing the Net Present Value and Lifetime emissions, Scenarios 2 and 4 outperform the BAU to a similar degree.

2 BEV

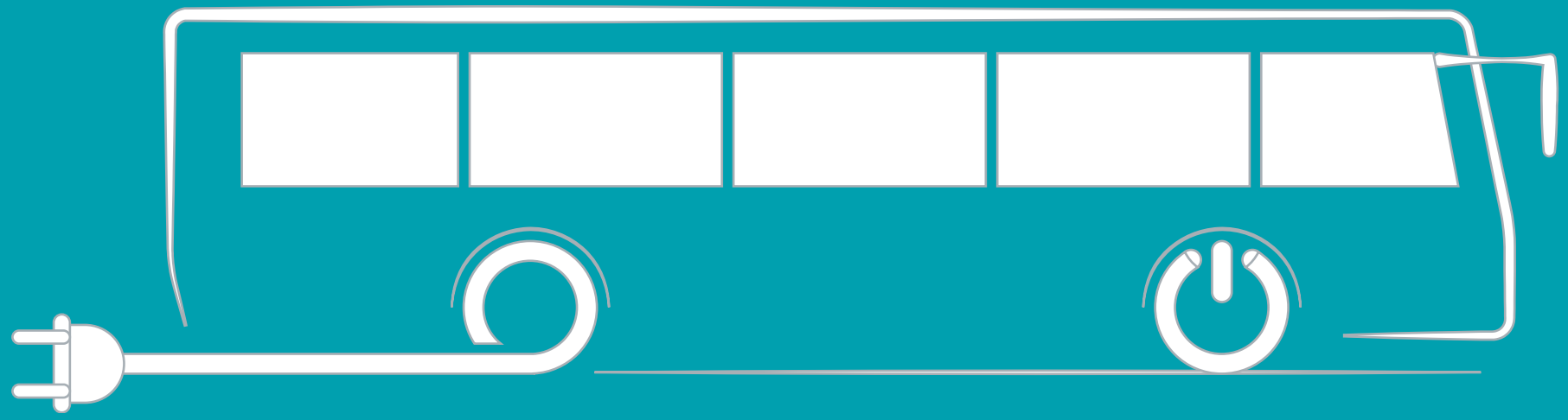
4 CNG to BEV

Net Present Value Comparison

Scenario Results (NPV)			
Saint John BAU	BEV	FCEV	CNG to BEV
225,845,226	213,886,615	267,798,511	214,343,222
100.0%	94.7%	118.6%	94.9%
	-5.3%	18.6%	-5.1%

Scenario Emissions Comparison

Scenario Results (NPV)			
Saint John BAU	BEV	FCEV	CNG to BEV
74,729	36,582	36,065	34,922
100.0%	49.0%	48.3%	46.7%
	-51.0%	-51.7%	-53.3%



PART D
Recommendations

Next Steps

Saint John to move forward with a Low-Carbon Migration Strategy aimed at using Battery Electric Vehicles (BEVs). Implementation opportunities outlined in the report should be explored to further improving the adoption plan outlined in the roadmap.

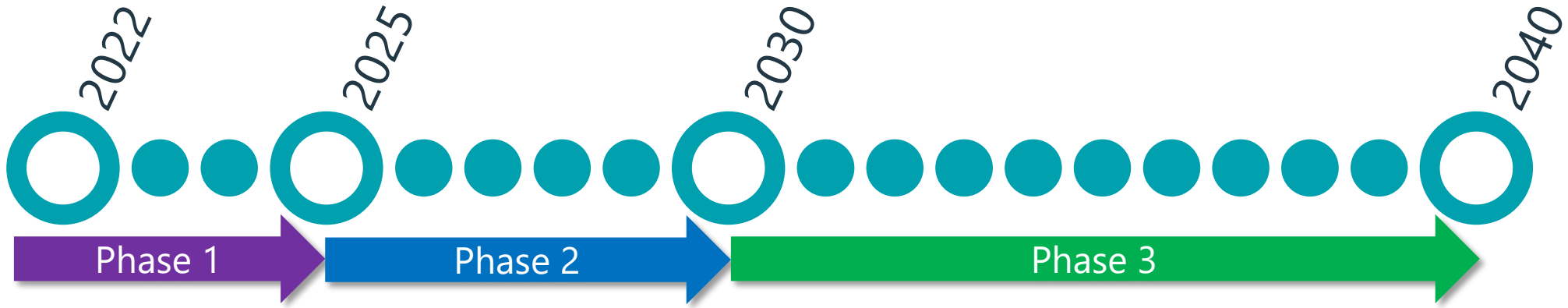
Implementation Opportunities are presented in five (5) themes:

- Continuous improvements and reviews to be made to the migration plan.
- Implementation opportunities for the City to explore.
- The timing of vehicle pilots to test new municipal and transit fleet vehicles.
- Implications for staff readiness (need for communication and changes to SOPs)
- List of facility modifications required to accommodate battery electric vehicles
- The roadmap will suggest times to re-evaluate the viability of hydrogen technologies in Saint John.

The roadmap includes suggested times to re-evaluate the viability of hydrogen technologies.

- The most significant decision point for FCEV will be in advance of electrical infrastructure upgrades, scheduled for 2026.
- The City should continue to explore private partnerships and investment which could help hydrogen technologies to meet the competitiveness of battery-electric technologies. Namely, in capital and operating costs, as well as risks associated with the nascent technology. Recall that commercial vehicles have yet to be announced for many heavier vehicle classes.

High-Level Roadmap



Phase 1

- Begin grant/funding applications.
- Implement PHEV and BEV for General Purpose Vehicles. Implement HEV for Police and HD Vehicles. Implement BEV for the transit fleet.
- Pilot BEV light duty trucks, streetsweepers, and refuse trucks.
- Explore implementation opportunities (public charging, on-demand transit, community targets).
- Explore external partnerships and investments that would make FCEV technologies competitive with BEV.

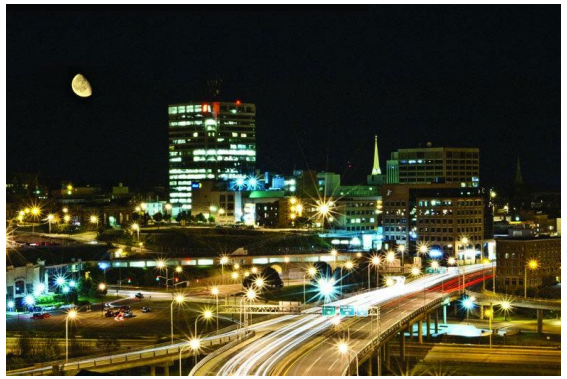
Phase 2

- Review/update migration plan to review the competitiveness of hydrogen technologies.
- Implement electrical utility upgrades/expansions.
- Implement BEV for light duty trucks, streetsweepers, and refuse trucks.
- Pilot BEV for remaining vehicles classes.
- Expand market scan to remaining assets (equipment/construction/off-road).

Phase 3

- Review/update migration plan to review planned vs actual progress of the migration plan.
- Implement additional electrical utility upgrades/expansions.
- Implement BEV for remaining vehicles classes.
- Implement zero emission solution for City equipment, construction, and off-road assets.
- Review the progress of electrical grid decarbonization.

Additional Benefits



Local Energy Production and Expenditure



Increased Revenue for Saint John Energy



Improved Energy Price Stability



Community Decarbonization

SAINT JOHN wood.

Council Recommendations

It is recommended that Common Council approve the following items:

1) Adopt the City of Saint John Public Transit and Fleet Low Carbon Migration Strategy , subject to approved budgets and,

2) Direct staff to apply to the Federation of Canadian Municipalities (FCM) under the Green Municipal Fund (GMF) for the Fleet and Transit Pilot Project

SAINT JOHN

COUNCIL REPORT

M&C No.	2022-129
Report Date	April 13, 2022
Meeting Date	April 19, 2022
Service Area	Utilities and Infrastructure Services

Her Worship Mayor Donna Noade Reardon and Members of Common Council

SUBJECT: 2022 Memorial Cup – Legacy Project

AUTHORIZATION

Primary Author	Commissioner/Dept. Head	City Manager
J. Brent McGovern	***J. Brent McGovern***	***John Collin***

RECOMMENDATION

It is recommended that:

1. The City enter into a Donation Agreement with the *2022 Memorial Cup Saint John Host Company Inc.* for the purpose of receiving a newly constructed ball hockey arena in the form attached to M&C No. 2022-129; and that the Mayor and City Clerk be authorized to execute the necessary Donation Agreement documents.
2. The Mayor and City Clerk be authorized to execute the Canadian National Railway Company Release of Liability and Permit License document in the form attached to M&C No. 2022-129 for purposes of allowing the construction of the ball hockey arena.

EXECUTIVE SUMMARY

The *2022 Memorial Cup Saint John Host Company Inc.* also known as the Host Organizing Committee wishes to leave a legacy project to the City of Saint John. The project would be the construction of a ball hockey surface adjacent to the skateboard park in the area of TD Station.

The cost of construction of the ball hockey surface would be borne by the Host Organizing Committee and the site would be turned over to the City of Saint John to maintain and operate as detailed in the attached Donation Agreement. The Host Organizing Committee has offered to provide via a fund $35,000 to support the operations and maintenance of the facility for a period of 5 years.

Numerous site stakeholders have been engaged and the various stakeholders have advised that there will be typical conditions listed within permits, but they do not foresee issues that would prevent the construction of the ball hockey facility. Attached is a document from the Canadian National Railway Company and New Brunswick Southern Railway that is a Release of Liability and Permit License

which authorizes the construction of the ball hockey arena despite a minor property encroachment.

PREVIOUS RESOLUTION

NA

REPORT

Background

The Memorial Cup, one of the most prestigious and coveted trophies in North American sport, has a rich tradition and the 2022 Memorial Cup will be held in Saint John, beginning Monday, June 20 and continuing until Wednesday June 29, 2022, when the Championship Final will be held.

The *2022 Memorial Cup Saint John Host Company Inc.* is the official entity responsible for hosting the 2022 Memorial Cup including all activities relating to the planning, preparing and hosting the event. The Host Organizing Committee has a desire to leave a legacy project to the City of Saint John as a legacy of the Memorial Cup being held in Saint John and staff have been working collaboratively with members of Committee.

Memorial Cup Legacy Project

The legacy project envisioned by the Host Organizing Committee involves the construction of a ball hockey surface in the area of TD Station and in a location that is centrally accessible for youth and well connected to an active transportation network that allows for the ease and safe passage of youth to the location. The Committee is passionate that they want to reduce barriers to entry for youth in hockey by making the sport available at essentially no cost (stick only required) by offering an outdoor ball hockey facility. Staff have reviewed various sites with this in mind while also seeking a site that would not be developed in the future so as to ensure there is no negative impacts to growth in Saint John and while also considering co-locating city assets which provides convenience for citizens and minimizes operating costs for the City. Through the collaborative work, the site arrived at is adjacent to the skateboard park as shown in the figure below.



Figure 1. Memorial Cup – Outdoor Ball Hockey Surface General Location

The site location while it makes beneficial use of an underutilized site and a site that cannot be developed it also provides various challenges because of the amount of infrastructure in the area. Because of the infrastructure in the area staff have worked collaboratively with the various stakeholders to identify if this location would be suitable. The stakeholders include Port Saint John, Enbridge's Maritimes and Northeast Pipeline, NB Southern Railway, CN Railway, Department of Transportation and Infrastructure and Port Saint John.

Feedback from the Department of Transportation and Infrastructure due to the surface being in close proximity to its bridge piers and because the facility would be partially located under the off ramp from the viaduct, for safety reasons the facility would need to be closed in the winter months and it could reopen again in the summer months.

While discussions continue the various site stakeholders as it relates to the permitting required, at this point, the various stakeholders have advised that there will be typical conditions listed within permits, but they do not foresee issues that would prevent the construction of the ball hockey facility.

While seeking to integrate the ball hockey facility into the broader Harbour Passage trail system, the following integration is being proposed as shown in Figure 2. The site would also be landscaped such that it enhances and beautifies this coastal area transitioning it from an asphalt surface parking lot to a youth active ball hockey area.

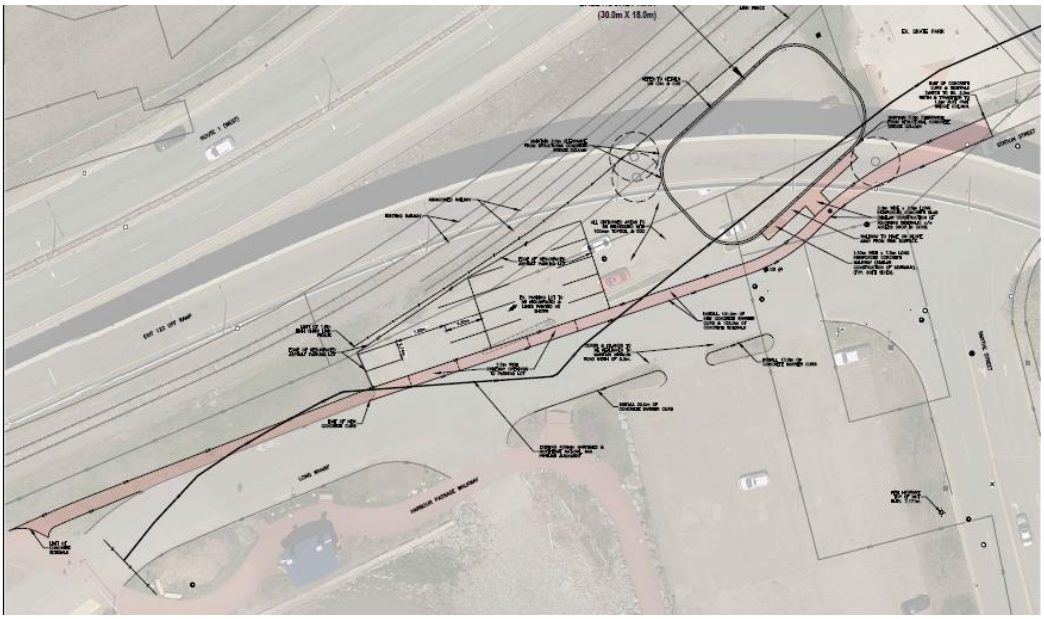


Figure 2. Memorial Cup Legacy Project Integrated into the Harbour Passage Trail System

The asset would be constructed to a suitable standard meeting the City's needs and completed prior to the start of the Memorial Cup on June 20, 2022 and turned over to the City of Saint John. Below in Figure 3 is a picture from the product specification showing what the boards and finished product would look like.



Figure 3. New Board System for the Memorial Cup Legacy Project

To ensure the safety and security of the site, lights are being planned as part of the construction along with signage. It is noteworthy that staff from Public Works and Transportation have advised that from their experience they have had few issues with the skateboard park that is adjacent to this site. The board system also comes complete with a means to lock it.

As it relates to land, the City of Saint John owns most of the land in the area and Real Estate has identified land needs beyond the City parcel, the land matter as it relates to Port Saint John is being reported on under separate cover and the land matter as it relates to the Canadian National Railway Company and New Brunswick Southern Railway Company is addressed in an attached document through the release of liability and a permit license.

To formalize such an initiative, a Donation Agreement has been prepared for Council's consideration – see appended document. This Agreement lays out the various requirements in order for the City to accept the donation and it specifies the details of the transfer of the asset.

STRATEGIC ALIGNMENT

The Memorial Cup and its legacy project align with Council's priorities of GROW, BELONG and MOVE.

SERVICE AND FINANCIAL OUTCOMES

The cost of construction of this new asset would be borne by the *2022 Memorial Cup Saint John Host Company Inc.* and estimates at this point show the cost to supply and install the new outdoor ball hockey board system and to complete the civil works to prepare the site and construct the concrete pad is in the order of a $400,000 to $550,000 (including HST).

Staff from Public Works and Transportation completed an analysis of the operations/maintenance costs associated with this asset and overall, annual operating costs are in the order of $6k to $8k per year which is essentially the cost of staff time to erect the board system in the spring of the year and remove it in the fall of the year along with some minor costs for maintenance and repairs. The other ongoing cost is the collection and disposal of garbage from the site on a regular basis and Public Works and Transportation staff advised the additional cost is negligible given the co-location of this site with that of skateboard park which they already visit on a regular basis. The Host Committee have reviewed this cost and they have advised they will establish a fund in the amount of $35,000 for the express purpose of paying the yearly operating expenses for a period of 5 years. The appended Donation Agreement details this commitment by the Host Committee.

It should be noted that a minor number of parking spaces would be displaced with the construction of the ball hockey surface and in discussions with SJ Parking they have advised that there will be no revenue loss as a result of this as the parking spaces currently in use in this area will be moved to the Smythe Street parking lot where there is vacancy and as a result of the construction there be slightly lower plowing costs, due to the smaller area.

There is a lump sum cost of $3,500 plus HST that is payable to CN for the permit license and this cost can be managed within the operating budget.

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

Internal input has been provided by Public Works and Transportation, Growth and Community Services, General Counsel's Office, Real Estate and the City's Risk Manager.

External input has been provided by Port Saint John, Enbridge's Maritimes and Northeast Pipeline, NB Southern Railway, Canadian National Railway, Department of Transportation and Infrastructure and Port Saint John.

ATTACHMENTS

1. Donation Agreement
2. Canadian National Railway Company Release of Liability and Permit License

DONATION AGREEMENT

This Donation Agreement ("**Agreement**") is made as of the ● day of April, 2022 (the "**Acceptance Date**").

BY AND BETWEEN:

2022 MEMORIAL CUP SAINT JOHN HOST COMPANY INC., a company incorporated under the *Companies Act* (New Brunswick)
(hereinafter referred to as the "**Committee**" and the "**Donor**")

- and –

THE CITY OF SAINT JOHN, a body corporate by Royal Charter, confirmed and amended by Acts of the Legislative Assembly of the Province of New Brunswick
(the "**Recipient**")

Recitals

A. **Whereas** the Committee is constructing a ball hockey arena (the "Arena") as one of the activities being undertaken in connection with the hosting of the 2022 Memorial Cup playoff games for the Canadian Hockey League**;**

B. **And Whereas** following the conclusion of the 2022 Memorial Cup, the Committee desires to transfer the Arena to the Recipient and, after all activities associated with the 2022 Memorial Cup are completed, dissolve;

C. **And Whereas** the Recipient desires to accept the transfer of the Arena from the Donor, as well as all of the Donor's assets associated with the Arena, and the assignment of all of the Donor's present and future liabilities in respect of the Arena;

D. **And Whereas** the Donor intends to provide for a "legacy fund" that will cover all present and future liabilities and fund maintenance, and other expenses for the Arena arising for a period of five (5) years;

NOW THEREFORE, THIS AGREEMENT WITNESSES that in consideration of the sum of $1.00 paid by each party to the other, the provisions set forth in this Agreement and other good and valuable consideration (the receipt and sufficiency of which are hereby respectively acknowledged), the parties hereto covenant and agree as herein set forth.

1.0 Definitions and Interpretation

1.1 **Definitions** In this Agreement (including all schedules and other documents attached hereto or incorporated herein by reference), the following terms, words and expressions have the meanings hereby assigned to them, except where the context otherwise requires:

(a) "**Assets**" means all right, title and interest of Donor in and to the Arena and other assets, if any, owned by the Donor and used in connection with the Arena on the Closing Date, and as the parties agree may be more particularly described in the applicable Bill of Sale and other closing documents;

(c) "**Business Day**" means any day other than a Saturday, Sunday or statutory holiday in the Province in which the Real Property is situated;

(d) "**Claim**" means any claim, allegation, threat, suit, proceeding, charge, loss, cost, expense, liability, demand, action, debt, fine, penalty, judgment, order (including, without limitation, a Remedial Order), interest, payment and/or any and all manner of damages or other forms of remedy, whether civil, administrative, criminal or penal, and whether judicial or quasi-judicial (including with respect to any of the foregoing all legal costs on a solicitor and his own client basis, and other reasonable professional fees);

(e) "**Closing Date**" means 4:00*** p.m.** (local time) on the 30th day of June, 2022 or as the parties may mutually otherwise agree to in writing in accordance with this Agreement;

(f) "**Consents**" means any consent, approval, permit, clearance, licence or authorization of any Governmental Authority;

(g) "**Consultants**" means engineers, surveyors, hydrologists, contractors, consultants or other advisors retained by a party hereto;

(h) "**Donor**" means the party set forth on page one (1) of this Agreement;

(i) "**Donor's Solicitors**" means McInnes Cooper;

(j) "**Governmental Authority**" means any government, regulatory authority, governmental department, bureau, agency, commission, board, tribunal, crown corporation, licensing body, municipal or other local government council or board, court, judicial body, arbitral body or other law, rule, by-law or regulation-making entity having or purporting to have jurisdiction over this Agreement, the Real Property and/or any adjacent or neighbouring property on behalf of any nation, state, territory, province, municipality, district, locality or other jurisdiction;

(k) "**HST**" has the meaning set out in subsection 6.1;

(l) "**Law**" or "**Laws**" means all present and future general laws, or laws of general application, all statutes, civil codes, regulations, by-laws, ordinances, statutory orders, ministerial orders, requisitions, rules, codes, standards, certificates, policies and/or guidelines of any organization, whether public or private, and of any Governmental Authority;

(m) "**Liabilities**" has the meaning set out in subsection 2.2;

(n) "**Notice**" means any notice, approval, consent, instruction or other communication required or permitted to be given under this Agreement;

(o) "**Person**" means any individual, partnership, joint venture, corporation, trust, unincorporated association, Governmental Authority or any other entity;

(p) "**Place of Closing**" means Recipient's Solicitor's office or at such other location as the parties may mutually otherwise agree to in writing; and

(q) "**Real Property**" means, the easement and licence interest of the Donor in the land upon which the Arena is constructed, located at or near the intersection of Station Street, Smythe Street and the access road to Long Wharf, in the City of Saint John, New Brunswick, such location more particularly described in a Licence Agreement dated April 19, 2022 between the Donor and Recipient and in an Amended and Restated Indenture dated December 1, 2012 for PID 55151351 between the Saint John Port Authority and the City of Saint John.

(r) "**Recipient Indemnified Parties**" means, collectively, Recipient and each of Recipient's respective subsidiaries and affiliates, and each of their respective shareholders, directors, officers, employees, agents, Consultants, professional advisers, representatives, successors and assigns, and the heirs, executors, personal representatives, successors and assigns thereof.

1.2 **Interpretation** The recitals set out at the commencement of this Agreement form an integral part of this Agreement. Unless the context otherwise expressly requires, words such as "herein" and "hereunder" when used in this Agreement refer to this Agreement as a whole, and not to one particular part. Where the context permits, words importing the singular include the plural, and *vice versa*, words importing the masculine gender include the feminine and neuter genders, and respectively *vice versa*, and words importing persons include firms, associations and corporations, and respectively *vice versa*. The word "including", when following any general statement, term or matter, will not be construed to limit such general statement, term or matter to the specific items or matters set forth immediately following such word or to similar items or matters, whether or not non-limiting language (such as "without limitation" or "but not limited to" or words of similar import) is used with reference thereto, but rather will be deemed to refer to all other items or matters that could reasonably fall within the broadest possible scope of such general statement, term or matter. In the event there is more than one Recipient to this Agreement, the obligations of such parties hereunder are, respectively, joint and several. Unless the context otherwise requires, terms defined in this Agreement have the same meaning in all schedules attached hereto or incorporated herein by reference, and *vice versa*, all of which form part of this Agreement. The language of every provision of this Agreement is to be construed and interpreted according to its written and intended meaning, and not strictly against Donor or Recipient. Headings and any tables of contents contained in this Agreement are provided for ease of reference and are not to be taken as restricting or affecting the interpretation or construction of any provision of this Agreement.

1.3 **Time Periods** The computation of any time period referred to herein will exclude the day of the occurrence of the event to which the period relates and will include the last day of such period. Where the time limited for the doing of anything hereunder expires or falls on a day that is not a Business Day, the time so limited extends to and the thing may be done on the day next following that is a Business Day.

2.0 Assets and Real Property Donation, Assumption of Liabilities and Closing Date

2.1 **Assets Donation** Donor agrees to donate to Recipient, and Recipient agrees to accept from Donor, the Assets and Real Property having the values which will be included in the closing documents provided on the Closing Date, subject to and in accordance with this Agreement. The Recipient agrees to provide Donor with any documentation reasonably requested by Donor to evidence and confirm the donation and valuation of the Assets.

2.2 **Assignment and Assumption of Liabilities** The parties agree that the Donor shall assign, and the Recipient agrees to assume, all of the Donor's right, title and interest in, to and under all receivables and contracts currently in effect between the Donor and any third parties **in respect of the Arena** and all the benefits and advantages derived therefrom, including the benefit of any payments or deposits to be received by the Donor whatsoever existing on, or arising after, the Closing Date. The parties further agree that the Recipient shall assume all covenants, obligations and liabilities, duties, conditions and stipulations to any Person whatsoever existing on, or arising after, the Closing Date, the liabilities in the amount shown in the closing documents provided on the Closing Date, as well as any Claim that may be made up to or after the Closing Date (collectively, the "**Liabilities**") and the Recipient agrees to assume, perform and observe all of the Liabilities as if it were an original signatory thereto and, without limiting the generality of the foregoing, to enter into an Assignment and Assumption Agreement in the form generally attached hereto as **Schedule A** on the Closing Date.

2.3 Legacy Fund On the Closing Date, the Donor agrees to establish a legacy fund to be held by the Saint John Hockey Fund Ltd., which shall be used for the purpose of paying the Liabilities of the Recipient in respect of the Arena for a period of five (5) years from the Closing Date. Upon either five (5) years from the Closing Date or the exhaustion of monies in the legacy fund, whichever occurs earlier, the Recipient shall have no further obligation to maintain or expend monies on the Arena.

2.4 **Closing Date** Subject to any other provisions contained herein, this Agreement will be completed on the Closing Date, at the Place of Closing.

3.0 Conditions Precedent and Restrictive Covenants

3.1 **Construction of Arena** Prior to the Closing Date, the Donor shall construct the Arena to agreed upon specifications at the agreed upon location at the sole expense and liability of the Donor. As between the Donor and the Recipient, the Recipient shall have no liability whatsoever in respect of the construction of the Arena, or otherwise, prior to the transfer of the Assets to the Recipient.

3.2 **Licenses, Permits, and Approvals** To the extent any licenses, permits, and approvals are required to construct the Arena, the Donor shall be responsible to obtain any such licenses, permits, and approvals. Notwithstanding the foregoing, the Recipient shall arrange to provide a construction license to the Donor for any land owned by the Recipient and shall work to facillitate approvals necessary for the construction and operation of the Arena.

3.3 **Special Conditions** Any terms and conditions set out in **Schedule D** form an integral part of this Agreement.

4.0 Due Diligence By Recipient

4.1 **Due Diligence** Recipient acknowledges it has the opportunity to conduct due diligence and examine the title to the Assets and completion of closing on the Closing Date shall be deemed sufficient evidence the Recipient is satisfied with the results and state thereof. Recipient acknowledges it has the opportunity to conduct due diligence with respect to the Liabilities and completion of closing on the Closing Date shall be deemed sufficient evidence the Recipient is satisfied with the results and state thereof.

4.2 **Documents in Possession of Donor** Recipient will not call for the production of any title deed, abstract, survey or other evidence of title to the Assets, or other document, except such as is relevant and in the control or possession of Donor.

5.0 Closing Documents

5.1 **Donor Documents and Obligations** Donor will, at Donor's expense, prepare and (to the extent applicable) execute and deliver to Recipient on or before the Closing Date, in exchange for the assumption of the Liabilities by Recipient and the compliance by Recipient with this Agreement (including, without limitation, subsection 5.2) the following documents:

(a) Assignment of Licence and Easement Interests - such transfer and assignment of all of the Donor's licence and easement interest in the land upon which the Arena is located in such form as may be required to transfer to Recipient all of Donor's right, title and interest in the Real Property as required under this Agreement – to be executed by Donor;

(b) Bill of Sale – such bill of sale as may be required to transfer to Recipient all of the Donor's right, title and interest in the Assets as required under this Agreement – to be executed by Donor;

(c) Assignment and Assumption Agreement – an assignment and assumption agreement generally in the form attached hereto as **Schedule A** - to be executed by Donor and Recipient;

(d) Indemnity and Release Agreement(s) – in form generally as set out or incorporated by reference in **Schedule B** - to be executed by Recipient;

(e) Other Documents – such other documents as expressly required to be prepared and/or provided by Donor under this Agreement.

5.2 **Recipient Documents and Obligations** Recipient will execute and deliver to Donor on or before the Closing Date the following:

(a) Donor-Prepared Documents – all documents referred to in subsection 5.1 - to be executed and delivered by Recipient and any other parties as contemplated therein;

(b) Recipient's Certificate and Undertaking – generally in form as set out or incorporated by reference in **Schedule C**;

(c) Corporate Authority and Resolutions - a certified copy of a resolution of council of Recipient approving and authorizing the execution of this Agreement and all documents contemplated hereunder by Recipient and the due observance by Recipient of all of Recipient's covenants and obligations contained herein; and

(d) Other – such other documents as expressly, or reasonably contemplated to be, required to be prepared and/or provided by Recipient and any other parties as contemplated hereunder for the completion of this Agreement, together with any other documents as may reasonably be required by Donor and Donor's Solicitors, acting reasonably, for Recipient to satisfy the terms and conditions of this Agreement.

6.0 Harmonized Sales Tax

6.1 **HST** With respect to any goods and services tax or harmonized sales tax imposed in whole or part under the *Excise Tax Act* (Canada) and any similar tax imposed by any Governmental Authority (collectively, "**HST**") in connection with the donation and acceptance of the Real Property, Recipient hereby covenants with Donor that, subject to subsection 7.2, Recipient will either:

(a) provide Donor at closing with an executed Recipient's Certificate and Undertaking in the form attached as **Schedule C** (such Certificate and Undertaking to be dated not more than three (3) Business Days prior to the Closing Date); or

(b) it is not anticipated by the parties that HST will be payable on the donation. In the event that HST is assessed against the Donor, it shall be paid by the Recipient and, if necessary, the Recipient may utilize the funds held in the legacy fund established in accordance with paragraph 2.3 herein in order to pay said liability.

6.2 **Compliance** Donor and Recipient will from time to time, and at all times, do or cause to be done such further acts and execute and deliver, or cause to be executed and delivered, such further documents as will be required in order for Donor and Recipient to fully comply with requirements in respect of HST imposed by any Governmental Authority.

6.3 **Transfer Taxes and Registration Fees** In addition to Recipient's obligations under subsection 8.1, Recipient will pay and be liable for all transfer taxes and other taxes, levies and/or assessments applicable to or resulting from the transactions contemplated hereby, together with all fees and charges applicable to filing, registration or recording any deeds, transfers and other documents executed and delivered hereunder, but excluding (for certainty) any income tax payable by Donor.

7.0 New Laws

7.1 **Reliance on Present Laws** Donor is entering into this Agreement in reliance upon Laws in effect on the Acceptance Date affecting this Agreement, the parties hereto or the Real Property.

7.2 **New or Changed Laws** In the event that any Laws are changed or amended, or new Laws become effective, on or before the Closing Date (and whether by retroactive or retrospective effect, or otherwise), and the material effect of such changed or new Laws: (i) is not covered by any other provision of this Agreement; and (ii) has an adverse economic or operational effect upon Donor; Donor has the option to request renegotiation of all relevant terms and conditions of this Agreement. Such option may be exercised by Donor at any time after such changed, amended or new Laws are promulgated or become effective, by Notice of desire to renegotiate, such Notice to contain the new terms and conditions desired by Donor. If the parties do not agree upon new terms satisfactory to both parties within thirty (30) Business Days after Donor gives such Notice, Donor has the right to terminate this Agreement at the end of such thirty (30) day period.

8.0 General Provisions

8.1 **Independent Contractors** Nothing in this Agreement or under, pursuant to or by virtue of any acts of or arrangements between the parties hereto and/or between any party hereto and any third party, including, without limitation, any nominee designated by Donor, means or implies that Recipient is the employee, servant, partner, co-venturer, principal or agent, of or with Donor, or that the relationship of the parties hereto is anything other than that of independent contractors. No representations of any kind will be made or acts taken by Recipient, or by other Persons on their behalf, which could or might establish any apparent relationship between the parties hereto other than that of independent contractors.

8.2 **No Fiduciary Duties** For further certainty, the parties acknowledge and agree that no fiduciary relationship exists, is implied or arises under or pursuant to this Agreement or under, pursuant to or by virtue of any acts of or arrangements between the parties hereto and/or between any party hereto and any third party.

8.3 **Costs of Performance By Recipient** Whenever it is provided that Recipient must comply with, observe or perform any obligation in this Agreement, such compliance, observance or performance is entirely at the cost and expense of that party and whether incurred directly by Recipient or by Donor on such party's behalf, including legal costs on a solicitor and his own client basis.

8.4 **Severability** Subject to Section 7.0, any provision of this Agreement, or part thereof, which is held to be void, illegal or unenforceable is, at the option of Donor, to be considered separate and severable from the remaining provisions of this Agreement, which remain in full force and effect.

8.5 **Governing Law** This Agreement is governed by and will be construed and interpreted in accordance with the laws of the Province of New Brunswick and the federal laws of Canada applicable therein.

8.6 **Donor Approval May Be Withheld** Whenever Donor's approval or consent is required by the terms of this Agreement, such approval or consent may, unless otherwise expressly provided under this Agreement, be withheld by Donor provided it believes that it has justification for such withholding. Donor is not liable in any manner or for any Claim to Recipient or to any other Person for such withholding of approval or consent.

8.7 **Remedies Cumulative** The rights and remedies of Donor under this Agreement are in addition to, and not in substitution for, any other rights and remedies of Donor available at law or in equity.

8.8 **No Waiver** No acceptance of any amounts subsequent to any default by Recipient hereunder, nor any condoning, excusing or overlooking by Donor of any past, present or continuing default, acts as a waiver of any of the provisions of this Agreement, or in any way affects the rights and remedies of Donor hereunder, unless agreed to by Donor in writing.

8.9 **Notices** Except as in this Agreement otherwise expressly provided, any Notice will be in writing and delivered personally or by mail (postage prepaid), electronic mail, courier (courier prepaid) or by telecopy/facsimile that provides written confirmation of transmission, addressed to Donor or Recipient, as the case may be, at the following addresses:

Donor:
2022 Memorial Cup Saint John
Host Company Inc.
99 Station Street, Suite 200
Saint John, NB
E2L 4X4

- with a copy to -
McInnes Cooper
1 Germain Street, Suite 1700
P.O. Box 20095 RPO Brunswick Square
Saint John, NB
E2L 5B2

Recipient:
City Clerk
The City of Saint John
City Hall
15 Market Square
Saint John, NB
E2L 4L1
cityclerk@saintjohn.ca

- with a copy to
General Counsel Office
City Hall
15 Market Square
Saint John, NB
E2L 4L1
generalcounsel@saintjohn.ca

or at such other or amended address as is given by a party hereto to the other(s) in accordance herewith. Any Notice is deemed to have been received when delivered or, if mailed or sent by courier, on the fourth (4^{th}) Business Day after it was mailed or couriered (except in the event of a disruption in mail or courier service, in which event any Notice will be delivered by other reliable means until the resumption of normal service) or, if sent by telecopy/facsimile, on the day of transmission if sent prior to 3:00 p.m. (recipient local time) on a Business Day and, if not, then on the next Business Day of the recipient. The parties may at any time change their respective addresses for service of Notice hereunder, but only by giving Notice thereof in the manner provided in this subsection. Recipient will promptly notify Donor in writing of any change in its mailing or other communication address.

9.10 **No Registration** Recipient will not file or register this Agreement, in whole or part, or any document which may evidence or give notice of this Agreement, in any land registry, land titles or other public offices, except where required by Law, and only in such form as Donor approves.

9.11 **Recipient Not Non-Resident** Recipient represents and warrants to Donor that it is neither a non-resident of Canada within the meaning of the *Income Tax Act* (Canada) nor a non-Canadian within the meaning of the *Investment Canada Act* (Canada), or any respective successor or similar statute.

9.12 **Further Assurances** Recipient agrees to do, execute and deliver all such further or other things and documents as in the opinion of Donor are necessary or desirable to carry out the intention of this Agreement, so as to enable Donor to secure and enjoy the full benefits hereof.

9.13 **Survival** All covenants, conditions, agreements, indemnities, releases, provisos, representations, warranties and obligations of Recipient contained herein which expressly or by their nature survive or should survive the expiration or other termination of this Agreement (however caused) continue in full force and effect for the benefit of Donor indefinitely, until they are satisfied in full or by their nature expire.

9.14 **Force Majeure** Donor is relieved of any obligations under this Agreement whenever and to the extent that the fulfillment or performance of such obligations is delayed, prevented or unduly frustrated, hindered or impeded as a consequence of any event of *force majeure*, which term includes, without limitation: (i) war, invasion, act of foreign enemy, hostilities (whether war has been declared or not), civil war, rebellion, revolution, insurrection, military or usurped power, sabotage or terrorism (or reasonable apprehension of any of the foregoing); (ii) strikes, lockouts or other labour disputes or disruptions of any kind, including working to rule, whether or not the same could be settled or resolved by acceding to the demands of any labour group; (iii) any Law or Laws; (iv) any accident, fire, shortage, plant disruption, breakdown, explosion or shutdown; (v) any curtailment, failure or cessation of supplies of crude oil, feedstocks or other products or the normal means of delivery thereof; (vi) total or partial expropriation, nationalization, confiscation or requisitioning; or (vii) any other cause whatsoever, whether similar or dissimilar to any of the foregoing, which is beyond the reasonable control of Donor, acting commercially reasonably.

9.15 **Entire Agreement** This Agreement constitutes the entire agreement between the parties concerning the transaction contemplated hereby, and all prior negotiations, proposals, discussions and writings pertaining to this Agreement or the subject matter hereof are cancelled, null and void and superseded by this Agreement. This Agreement will not be modified or amended except with the written consent of both of Donor and Recipient and no modification or amendment to this Agreement binds Donor or Recipient, respectively, unless in writing and executed by it. Recipient acknowledges that Donor has made no representation, warranty, collateral agreement or condition, whether direct, indirect or collateral, written or oral or express or implied, which induced Recipient to make or enter into this Agreement or any documents collateral hereto or on which reliance is placed by Recipient, or which affects this Agreement or the Real Property other than as expressed in writing in this Agreement. After the Acceptance Date and on and before the Closing Date, no conditions, warranties, representations or other agreements concerning the transactions contemplated by this Agreement will be valid and binding on Donor unless in writing and executed by Donor or by Donor's Solicitors on Donor’s behalf.

9.16 **Time of Essence** Time will in all respects be of the essence hereof, provided that the time for doing or completing of any matter provided for herein may be extended or abridged in accordance with the terms of this Agreement or by an agreement in writing signed by Donor and Recipient or by their respective solicitors (who are hereby expressly appointed in this regard), and time will be of the essence with respect to any such extended or abridged deadline.

9.17 **Assignment** Recipient will not assign this Agreement or any right or interest arising herefrom, in whole or in part, without the prior written consent of Donor, which consent may be withheld by Donor in its sole and unfettered discretion or given with conditions. Under no circumstances will Donor consent to an assignment after the expiration of the Due Diligence Period. Donor may assign or transfer this Agreement, and any right or interest arising herefrom, in whole or in part; such assignment by Donor to take effect upon Notice to Recipient or its solicitors, together with the written assumption by such assignee of all the obligations of Donor to Recipient hereunder. This Agreement inures to the benefit of and is binding upon Donor, its successors and assigns and inures to the benefit of and is binding upon Recipient, and their respective heirs, executors, personal representatives, successors and (solely to the extent permitted) assigns.

9.18 **No Merger** Except as may be otherwise expressly provided herein, all provisions of this Agreement for the benefit of Donor and the provisions of any document delivered pursuant to this Agreement for the benefit of Donor will not expire with or be terminated, merged or extinguished by the closing of the donation of the Assets and Real Property pursuant to this Agreement, or by any subsequent changes in the legal and/or beneficial ownership of, or use or occupation of, the Assets or Real Property from time to time. Except as expressly set forth in this Agreement, no representation, warranty or covenant made herein by Donor survives the Closing Date.

9.19 **Disclaimer By Donor** Notwithstanding any other provision of this Agreement, under no circumstances (and whether based, without limitation, on Law or in equity, including theories of indemnification, fundamental breach, breach of representation and warranty or breach of contract), except for fraud, is Donor liable to Recipient or any other Person under or in connection with this Agreement or under or in connection with the transactions contemplated hereby, or otherwise in respect of this Agreement, for so-called special, incidental, indirect or consequential damages, including (without limitation) punitive damages, loss of revenues or profits, lost opportunity, decline in market capitalization, cost of borrowing, availability of funds,

loss of value of property, and any Claim whatsoever arising as a result of any delay in the development of the Real Property and/or any construction activities contemplated or carried out thereon.

9.20 **Independent Investigation and Advice** Recipient warrants and acknowledges to Donor that it has entered into this Agreement only after having been afforded full opportunity to review and make such independent investigations of this Agreement (including all schedules and attachments hereto) and of the Assets and Real Property, and being advised of the value of using or employing such independent legal, financial, accounting, engineering and other advisers, all as considered necessary or desirable by Recipient and in reliance thereon, and not in reliance upon any documents, matters, representations or things (whether written or oral) that are not expressly adopted or incorporated in this Agreement. Recipient further acknowledges and agrees that Donor has co-operated fully with all such reviews and investigations. Recipient further acknowledges having read and understood all provisions of this Agreement (including and together with all schedules and attachments hereto). Recipient acknowledges having received a complete true copy of this Agreement in advance of the execution and delivery thereof and that it is entitled to a fully executed copy thereof after execution by all parties hereto.

9.21 **Language** The parties hereto have expressly required that this Agreement and all deeds, documents and notices relating thereto be drafted in the English language; les parties aux présentes ont expressément exigé que la présente convention et tous les autres contrats, documents ou avis qui y sont afférents soient rédigés en langue anglaise.

9.22 **Counterparts** This Agreement may be executed and delivered in multiple identical counterparts but shall not come into effect until each Party has executed and delivered at least one such counterpart. Each counterpart shall be an original of this Agreement and all counterparts together shall constitute but one and the same Agreement. Signatures delivered by facsimile are deemed to be for all purposes original counterparts of this Agreement.

9.23 **Schedules to Agreement** This Agreement includes the following schedules, all of which form an integral part hereof:

Schedule A – Assignment and Assumption Agreement
Schedule B - Indemnity and Release Agreement
Schedule C - Recipient's Certificate and Undertaking
Schedule D - Special Conditions

IN WITNESS WHEREOF Donor and Recipient have duly executed this Agreement as of the Acceptance Date.

2022 MEMORIAL CUP SAINT JOHN HOST COMPANY INC.

Per: _____

Per: _____

THE CITY OF SAINT JOHN

Per:_____

Per:_____

(affix seal)

Schedule A

ASSIGNMENT AND ASSUMPTION AGREEMENT

THIS ASSIGNMENT AND ASSUMPTION AGREEMENT dated the ●day of ●, 2022 (the "**Effective Date**").

AMONG:

2022 MEMORIAL CUP SAINT JOHN HOST COMPANY INC.
(the "**Assignor**")

- and –

THE CITY OF SAINT JOHN
(the "**Assignee**")

WHEREAS:

A. On the ● day of April, 2022, the parties hereto entered into a Donation Agreement (the "**Donation Agreement**").

B. The Assignor has or will transfer certain of its ball hockey arena Assets, as described in the Donation Agreement, to the Assignee and the Assignee has agreed to assume, perform, and observe all of the liabilities, covenants, obligations, duties, conditions, and stipulations of the Assignor with respect to such Assets.

NOW THEREFORE THIS AGREEMENT WITNESSETH THAT for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by the parties, the Assignor and the Assignee agree as follows:

DEFINITIONS

1. Any capitalized words used in this Assignment and Assumption Agreement that are not defined herein shall have the meanings given thereto in the Donation Agreement.

ASSIGNMENT

2. As of the Effective Date, and in accordance with the provisions of this Assignment and Assumption Agreement, the Assignor hereby assigns, transfers and sets over to the Assignee, its successors and permitted assigns, all of its right, title and interest in, to and under all receivables and contracts currently in effect between the Assignor and any third parties and all the benefits and advantages derived therefrom, including the benefit of any payments or deposits to be received by the Assignor in respect of the ball hockey arena Assets (collectively, the "**Assigned Interests**"). Without limiting the generality of the foregoing, the third party contracts shall include those agreements listed in the table attached hereto as **Schedule "I".**

LEGACY FUND AND ASSUMPTION OF LIABILITIES

3. The Assignor covenants with the Assignee that it shall deposit funds in the amount of $35,000.00 with the Saint John Hockey Fund Ltd, a not-for-profit entity using the business name "Saint John Sea Dogs Foundation", for the express purpose of paying the yearly operating expenses of the Assets for a period of 5 years, such funds to be disbursed by the Saint John Sea Dogs Foundation in equal yearly amounts to the Assignee or upon the request of the City in order to pay any liability that arises due to paragraph 6.1 of the Donation Agreement.

4. The Assignee acknowledges receiving a copy of financial statements of the Assignor pertaining to the ball hockey arena Assets (the "**Financial Statements**") and hereby accepts the assignment of the Assigned Interests, as of the Effective Date.

5. The Assignee hereby assumes all of the Assignor's covenants, obligations and liabilities pertaining to the ball hockey arena Assets, whether reflected in the Assignor's Financial Statements or otherwise, arising both before and after the Effective Date, and agrees to assume, perform and observe all of the liabilities, covenants, obligations, duties, conditions and stipulations of the Assignor as if it were an original signatory thereto. Without limiting the generality of the foregoing, the liabilities shall include any liabilities of the Assignor in respect of the Assets to the parties listed on the attached **Schedule "II".**

REPRESENTATIONS AND WARRANTIES OF ASSIGNEE

6. The Assignee represents and warrants that it has full power, authority and right to execute, deliver and perform its obligations hereunder and under this Assignment and Assumption Agreement, and that the same have been duly authorized and that this Assignment and Assumption Agreement has been duly executed and delivered.

BINDING EFFECT

7. This Assignment and Assumption Agreement shall enure to the benefit of and be binding upon the Assignor and the Assignee and their respective successors, transferees and permitted assigns.

GOVERNING LAW

8. This Assignment and Assumption Agreement shall be governed by and interpreted and enforced in accordance with the laws of the Province of New Brunswick and the federal laws of Canada applicable therein.

COUNTERPARTS

9. This Assignment and Assumption Agreement may be executed in any number of counterparts and all of such counterparts taken together shall be deemed to constitute one and the same instrument, and it may be delivered in electronic form, including without limitation by e-mail or facsimile.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF the parties hereto have property executed this Assignment and Assumption Agreement effective as of the day and year first above written.

2022 MEMORIAL CUP SAINT JOHN HOST COMPANY INC.

Per: _____

Per: _____

THE CITY OF SAINT JOHN

Per:_____

Per:_____

(affix seal)

Schedule "I"
Assigned Third Party Agreements

Counterparty	Description

SCHEDULE "II"
LIST OF VENDORS

[specify]

[End of Schedule C]

Schedule B

INDEMNITY AND RELEASE AGREEMENT

This Indemnity and Release Agreement made as of the _____ day of _____, 2022 (the "**Acceptance Date**").

B E T W E E N:

2022 MEMORIAL CUP SAINT JOHN HOST COMPANY INC.
(the "**Donor**")

- and -

THE CITY OF SAINT JOHN
(the "**Recipient**")

RECITALS

A. Pursuant to a Donation Agreement dated April _____, 2022 (the "**Donation Agreement**"), Donor agreed to donate and Recipient agreed to accept certain assets described in Appendix A hereto, including the Memorial Cup ball hockey arena (the "**Assets**");

B. Recipient agreed in the Donation Agreement to execute and deliver this indemnity and release agreement ("**Agreement**") confirming its obligations to indemnify and release Donor as provided in the Donation Agreement;

THIS AGREEMENT WITNESSES that in consideration of the sum of $1.00 paid by each party to the other or others, in consideration of the provisions set forth in this Agreement and other good and valuable consideration (the receipt and sufficiency of which are hereby respectively acknowledged), Recipient covenants and agrees with Donor as herein set forth.

1.0 Indemnify Recipient

Without limiting, and in addition to, any other indemnities provided by Recipient in the Donation Agreement, Recipient (the "**Indemnitor**") covenants and agrees with Donor:

(a) to be liable for any Claim; and

(b) in addition, to indemnify, defend and hold the Donor, its officers, directors and employees (collectively, with the Donor, the "**Donor Indemnified Party**") completely harmless in respect of any Claim;

whenever and however caused or incurred, and which is directly or indirectly incurred, sustained or suffered by or alleged or asserted against any Donor Indemnified Party relating to, arising out of, resulting from or in any way connected with the Arena, including, without limitation, the following: (i) any latent defects howsoever caused whether through or attributable to the negligence, willful misconduct or other actions of Donor and/or any other Person or otherwise; (ii) the failure of Donor and/or any other Person to comply with any Laws, common law, Consents or directions connected therewith whether existing prior to, on or arising on or after the Closing Date; (iii) the costs and expense to study, investigate, clean-up, remediate, control, remove, manage or undertake other action relating to the Arena required by Laws, common law, Consents or directions connected therewith; or (iv) personal injury or death associated with use of the Arena as defined in the Donation Agreement. Indemnitors acknowledge and agree that this Section and the covenants of Indemnitors contained herein will not expire with or be terminated, merged or extinguished by the closing of the transaction Donation Agreement, and the completion thereof; and the indemnity herein will be conclusively deemed to have been made at the Closing Date with the same force and effect as though such indemnity had been made at that time, and the provisions of this Section survive the closing of such transaction.

2.0 Recipient's Release of Donor

Recipient covenants and agrees to release and discharge Donor Indemnified Party, with effect as and from the Closing Date, from each and every Claim whatsoever that Recipient Related Party or any of them may now have or may have hereafter, or howsoever suffer, sustain or incur in regard to, arising out of, or in any way connected with Environmental Matters. Recipient further covenants and agrees that, in respect of the Real Property, Recipient will not directly or indirectly: (i) attempt to require, compel or order Donor Indemnified Party to (A) study, investigate, remediate, control, clean up, remove or manage, or (B) pay for the study, investigation, remediation, control, clean up, removal or management, of any contaminant, sludge or other substances, material, or waste, or any constituent element thereof; or (ii) seek or pursue any Claim or other remedies therefor. Recipient acknowledges and agrees that this Section and the covenants of Recipient contained herein will not expire with or be terminated, merged or extinguished by the closing of the transaction contemplated by the Donation Agreement, and the completion thereof; and the release and discharge herein will be conclusively deemed to have been made

at the Closing Date with the same force and effect as though such release and discharge had been made at that time, and the provisions of this section survive the closing of such transaction.

3.0 General Provisions

3.1 **Defined Terms** All capitalized terms used in this Agreement (including the recitals hereof) and not otherwise defined herein, have the same meanings as ascribed to them in the Donation Agreement, unless the context otherwise requires or indicates.

3.2 **Approval May Be Withheld** Whenever a party's approval or consent is required by the terms of this Agreement, such approval or consent may, unless otherwise expressly provided under this Agreement, be withheld by such party provided it believes that it has justification for such withholding. Such party is not liable in any manner or for any Claim to the other party or to any other Person for such withholding of approval or consent.

3.3 **No Waiver** No acceptance of any amounts subsequent to any default by Recipient hereunder, nor any condoning, excusing or overlooking by Donor of any past, present or continuing default, acts as a waiver of any of the provisions of this Agreement, or in any way affects the rights and remedies of Donor hereunder, unless agreed to by Donor in writing.

3.4 **Governing Law** This Agreement is governed by and will be construed and interpreted in accordance with the laws of the Province of New Brunswick and the federal laws of Canada applicable therein.

3.5 **Remedies Cumulative** The rights and remedies of Donor under this Agreement are in addition to, and not in substitution for, any other rights and remedies of Donor available at law or in equity.

3.6 **Notices** Except as in this Agreement otherwise expressly provided, any Notice will be in writing and delivered personally or by mail (postage prepaid), courier (courier prepaid) or by telecopy/facsimile that provides written confirmation of transmission, addressed to Donor or Recipient, as the case may be, at the following addresses:

Donor:
2022 Memorial Cup Saint John Host Company Inc.
99 Station Street, Suite 200
Saint John, NB
E2L 4X4

- with a copy to -
McInnes Cooper
1 Germain Street, Suite 1700
P.O. Box 20095 RPO Brunswick Square
Saint John, NB
E2L 5B2

City Clerk
The City of Saint John
City Hall
15 Market Square
Saint John, NB
E2L 4L1
cityclerk@saintjohn.ca

- with a copy to
General Counsel Office
City Hall
15 Market Square
Saint John, NB
E2L 4L1
generalcounsel@saintjohn.ca

or at such other or amended address as is given by a party hereto to the other(s) in accordance herewith. Any Notice is deemed to have been received when delivered or, if mailed or sent by courier, on the fourth (4^{th}) Business Day after it was mailed or couriered (except in the event of a disruption in mail or courier service, in which event any Notice will be delivered by other reliable means until the resumption of normal service) or, if sent by telecopy/facsimile, on the day of transmission if sent prior to 3:00 p.m. (recipient local time) on a Business Day and, if not, then on the next Business Day of the recipient. The parties may at any time change their respective addresses for service of Notice hereunder, but only by giving Notice thereof in the manner provided in this subsection. Each party will promptly notify the other party in writing of any change in its mailing or other communication address.

3.7 **Further Assurances** Recipient agrees to do, execute and deliver all such further or other things and documents as in the opinion of Recipient are necessary or desirable to carry out the intention of this Agreement, so as to enable Donor to secure and enjoy the full benefits hereof.

3.8 **Survival** All covenants, conditions, agreements, indemnities, releases, provisos, representations, warranties and obligations of Recipient contained herein which expressly or by their nature survive or should survive the expiration or other termination of this Agreement (however caused) continue in full force and effect for the benefit of Donor indefinitely until they are satisfied in full or by their nature expire.

3.9 **No Merger** Except as may be otherwise expressly provided herein, all provisions of the Donation Agreement for the benefit of Donor and the provisions of any document delivered pursuant to the Donation Agreement for the benefit of Donor will not expire with or be terminated, merged or extinguished by the closing of the Donation Agreement, or by any subsequent changes in the legal and/or beneficial ownership of, or use or occupation of, the Real Property from time to time. Except as

expressly set forth in the Donation Agreement, no representation, warranty or covenant made herein by Donor survives the Closing Date.

3.10 **Language** The parties hereto have expressly required that this Agreement and all deeds, documents and notices relating thereto be drafted in the English language; les parties aux présentes ont expressément exigé que la présente convention et tous les autres contrats, documents ou avis qui y sont afférents soient rédigés en langue anglaise.

IN WITNESS WHEREOF Recipient has duly executed this Indemnity and Release Agreement as of the Acceptance Date.

THE CITY OF SAINT JOHN

_____
Name:
Title:

_____
Name:
Title:

[affix seal]

Appendix A
To Indemnity and Release Agreement

ASSETS

[specify the assets]

Schedule C
RECIPIENT'S CERTIFICATE AND UNDERTAKING

TO: **2022 MEMORIAL CUP SAINT JOHN HOST COMPANY INC.**
(the "**Donor**")

AND TO: **MCINNES COOPER** , Donor's Solicitors

RE: Transfer of Assets and Real Property described in a Donation Agreement between Donor and the Undersigned ("**Recipient**") dated ●____, 2022 ("**Agreement**").

In consideration of, and notwithstanding closing of, the above-noted transfer of the Asset, and with respect to goods and services tax or harmonized sales tax (collectively, "**HST**") imposed under the *Excise Tax Act* (Canada) (the "**Act**") and with respect to any similar tax imposed under any provincial legislation or ordinance of a Territory in which the Asset is located in whole or part by reason of the transfer of the Asset and all buildings, structures and improvements therein and thereon, Recipient hereby covenants and certifies as set out below.

1. To the extent HST is payable in respect of this transaction in accordance with the Act and any applicable provincial legislation, the Recipient is liable for the payment of such HST.

2. Recipient, at the time of closing of the Agreement, is a registrant under the Act (HST registration number 122681158 RT0001). Recipient will file returns and remit on a timely basis any HST owing on account of this donated supply of the Asset to the Crown in right of Canada, to the full extent required by the Act.

3. The donated supply of the Asset does not constitute a supply of a residential complex made to an individual for the purposes of the Act.

4. Recipient will indemnify, defend and hold Donor, and Donor's respective successors and assigns, harmless from and against any liability of or claim against Donor under the Act arising out of any incorrect statement or breach of the obligations of Recipient set out in this Certificate and Undertaking or the Agreement or arising under the Act (including, without limitation, Recipient's obligation under subsection 228(4) of the Act), together with all fines, penalties, losses, costs, interest and expenses resulting from such error or breach.

DATED at the City of Saint John this ● day of ●, 2022.

THE CITY OF SAINT JOHN

Per:_____

Per: _____

(affix seal)

Schedule D

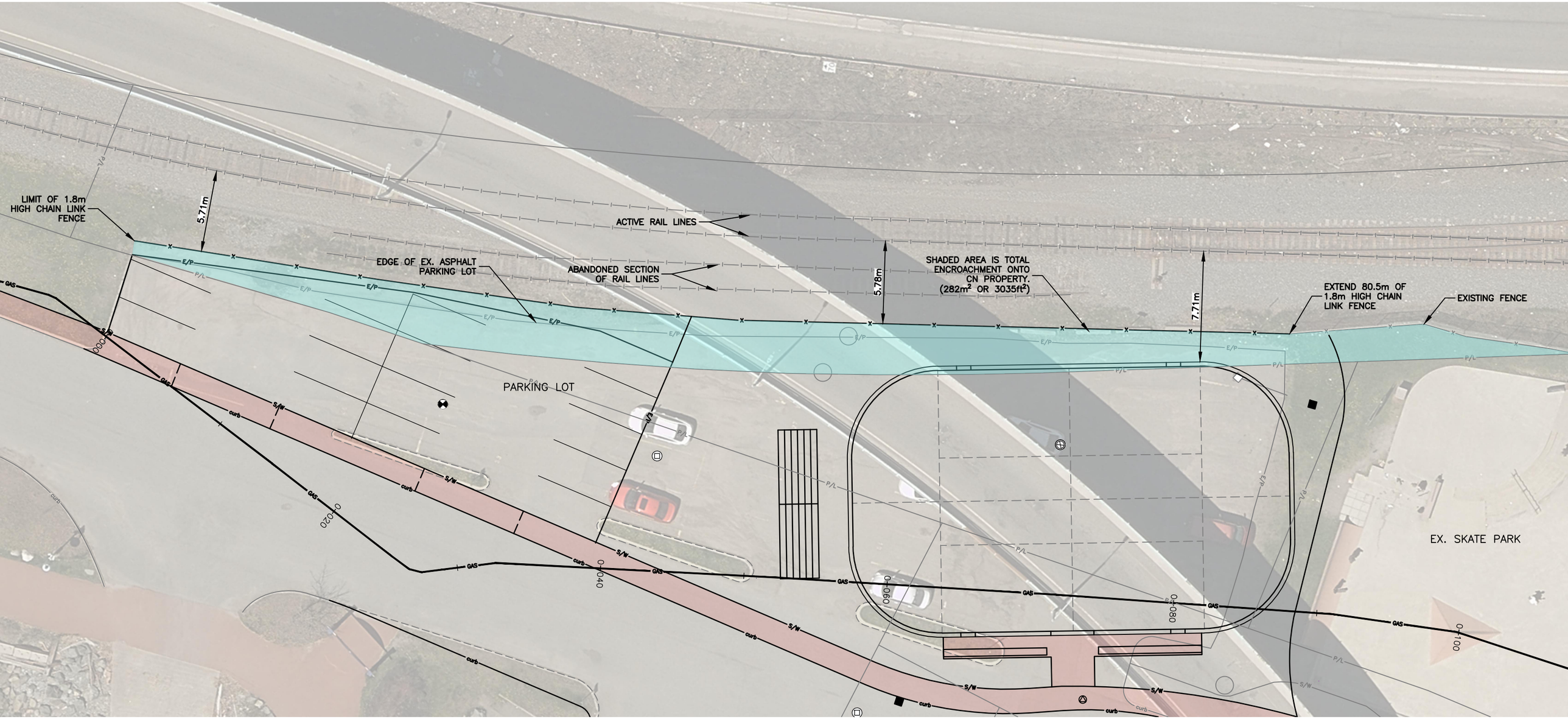
SPECIAL CONDITIONS

For the safety and security of the site lights will be installed as part of the construction along with signage.

Asphalt, concrete curb and landscaping work will be completed in accordance with the design drawings prepared by CBCL with the title “Memorial Cup Ball Hockey Plaza 2022”, Sheets CO1 to CO7, stamped by Brian Moreau, P.Eng.

[End of Schedule F]

Schedule A
Hockey ball Rink Encroachment



1000/_____

CANADIAN NATIONAL RAILWAY COMPANY
RELEASE OF LIABILITY AND PERMIT LICENSE

IN CONSIDERATION of **Canadian National Railway Company**, (hereinafter called "CN") granting _____ (hereinafter called the "Licensee"), its employees, servants, agents or contractors and its or their equipment, entrance upon CN's premises which is also leased to New Brunswick Southern Railway Company ("NBSR") located near Long Wharf road, City of St John, NB, for the purposes of building and maintaining a seasonal ball hockey rink partially encroaching with a fence showin in light green clour per the attached Schedule "A".

THE LICENSE herein granted shall become effective on the date hereof and shall remain in force, save as provided herein, subject to termination at any time giving to the other party not less than thirty (30) days' prior written notice.

THE LICENSEE shall pay to CN in advance for the privileges herein granted, the sum of $3 500, plus applicable taxes, payable upon receipt of the invoice.

NO ASSIGNMENT or transfer of any rights or privileges hereunder by the Licensee shall be valid without the prior written consent of CN.

THE LICENSEE agrees that permission hereunder shall at all times be exercised to the entire satisfaction of CN and in accordance with any lawful requirements, including environmental, of the Canadian Transportation Agency or other authority having jurisdiction.

THE LICENSEE agrees to indemnify and save harmless CN and its directors, officers, employees, servants, and agents from and against any and all claims, direct or derivative, demands, actions, suits or other proceedings, cost or liabilities arising out of the use of or its presence on the said premises, including any claim or demand for loss, damage or injury to any persons (including death) or to machines or other equipment brought upon the said premises or to property attributable to or connected with the exercise of this permission by or on behalf of the Licensee except to the extent that any such loss, damage, injury or death is caused by the negligence of CN, its employees, servants and agents.

THE LICENSEE further agrees to obtain and keep in force during the continuance hereof, a policy or policies of insurance, with coverage of not less than ten million dollars ($10,000,000), in which CN shall be named as an additional insured, without right of subrogation, insuring against any and all liability assumed by the Licensee by virtue of this permission. The Licensee will furnish, at CN's request, certified copies of the certificate of insurance.

IN THE CONTEXT of this release of liability and permit, "claims" shall include any awards made against CN under any statute for the protection of workers.

The LICENSEE further agrees that it will not interfere in any way whatsoever with the operational activities being performed by CN or its agents on CN property. When deemed necessary, CN may delay, interrupt or cancel the activities of the Licensee or the use of its property without exposure to penalty or responsibility.

The LICENSEE must observe and comply with the standards as established by CN with respect to operations and safety while the Licensee is on CN property.

NO MATERIAL, equipment, or person, for any reason whatsoever, can work less than fifty (50) meters from CN's mainline or other CN trackage without being protected by signposting furnished by CN or NBSR at the expense of the Licensee. The minimum distance can be increased or decreased by CN dependent on the nature of the work. The Licensee must at all time install and or maintain a fence (minimum 6 feet high) on the limit of the premises along the tracks at his own expense and responsibility.

UPON TERMINATION of this license, the Licensee shall leave the property and trackage in a clean and tidy condition, free of any debri resulting from or occurring during the Licensee's occupation, or use of the property or trackage. Failing this, CN or NBSR will return the property and trackage to its original condition, at the expense of the Licensee. Should any debri left by the Licensee results in damage to CN property or equipment, the charge for repairs shall be borne by the Licensee.

DATED at _____, Province of _____, this day of ____ of April 2022

Licensee

_____
(Name/Title)

I have authority to bind the corporation.

Canadian National Railway Company

_____

I have the authority to bind the corporation.

New Brunswick Southern Railway Company

_____

I have the authority to bind the corporation.

COMMON COUNCIL REPORT

M&C No.	2022-135
Report Date	April 13, 2022
Meeting Date	April 19, 2022
Service Area	General Counsel

Her Worship Mayor Donna Noade Reardon and Members of Common Council

SUBJECT: **Easement Amendment and License for an Outdoor Ball Hockey Arena – Station Street**

AUTHORIZATION

Primary Author	Commissioner/Dept. Head	City Manager
Curtis Langille	***Melanie Tompkins***	***John Collin***

RECOMMENDATION

1. That the City enter into a License Agreement with 2022 Memorial Cup Saint John Host Company Inc. for the purpose of granting a construction license for an Outdoor Ball Hockey Arena generally in the form as attached to M&C No. 2022-135 and that the Mayor and Clerk be authorized to execute the said License Agreement and any document ancillary thereto; and further

2. That the City enter into an amended and restated Indenture for an easement on Saint John Port Authority Lands for the purpose of permitting the construction and operation of an Outdoor Ball Hockey Arena generally in the form as attached to M&C No. 2022-135 and that the Mayor and Clerk be authorized to execute the said Indenture and any document ancillary thereto.

EXECUTIVE SUMMARY

The 2022 Memorial Cup brings great opportunity to Saint John. As a legacy gift, the organizing committee (the "Committee") proposes to leave The City of Saint John (the "City") with an outdoor ball hockey rink/arena (the "Arena"), at a site (the "Site") adjacent to the Skateboard Park, near TD Station. The project will be 100 percent constructed and funded by the Committee along with funds for ongoing maintenance. The purpose of this report is to seek permission for the City to enter into agreements that will facilitate construction on the City and SJPA lands.

PREVIOUS RESOLUTION

Common Council at its February 26, 2018 meeting adopted the following resolution:

"That The City of Saint John acquire from the Saint John Port Authority, easements for portions of Harbour Passage upon the terms and conditions set out in Easement #388 document attached; and that the Mayor and Common Clerk be authorized to execute any document(s) necessary to finalize this transaction."

REPORT

The 2022 Memorial Cup brings various great opportunities to Saint John. As a legacy gift, the Committee proposes to leave the City with the Arena, which will be available for public use. The project will be constructed and funded fully by the Committee along with funds for ongoing maintenance.

The selected Site, adjacent to TD Station and the Skateboard Park, has a number of benefits and also a few complexities, all of which can be managed by legal agreements and permits. As such, a number of reports and documents will be brought to Council in the coming weeks and months in this respect. Specifically, there are a number of different properties under separate ownership where the Arena is to be erected, including: SJPA, Provincial and City lands, as well as some private interests. The Provincial land will be managed through a HUP that will be brought to Council for consideration in a separate report. The ownership in the Arena, but not the underlying land, will be transferred to the City upon completion pursuant to a Donation Agreement, which is provided under a separate report.

In this report, two agreements are provided for consideration. First, a construction license granted by the City to the Committee and its contractor for the City parcel (PID 55209746), where the majority of the Arena will be sited. The standard-form license covers the risk and details of construction and charges a nominal license fee. A construction period ending in September 2022 is provided. It is anticipated that insurance will be covered in the overarching Donation Agreement, but if it is not, an appropriately enhanced insurance provision may be inserted in the license agreement prior to execution. The license agreement has not been reviewed by the Committee, but is the City standard template and we do not anticipate issues.

Second, an amended and restated indenture providing for an easement will, as noted above, provide for construction and occupation of the Arena on SJPA land, being adjacent to that portion of SJPA land used for the York Port Area/Harbour Passage trail system. The existing agreement incorporates three existing portions of Harbour Passage: York Point, Long Wharf, and Lower Cove Loop and, as amended, will include a small area required for the proposed Memorial Cup Plaza Ball Hockey Rink 2022 on substantially similar terms and conditions. The attached amended and restated indenture is essentially the same as approved by Council

in 2018, with the minor additions of the small area for the Arena. This agreement has been reviewed and approved by the SJPA.

With the approval of these two agreements, the Committee will be positioned to commence construction.

STRATEGIC ALIGNMENT

This report aligns with Council's Belong priority: by improving the diversity of recreational facilities and infrastructure being offered to the public that will improve the quality of life for the citizens of Saint John.

SERVICE AND FINANCIAL OUTCOMES

The construction and ongoing maintenance of the proposed outdoor ball hockey arena will be fully funded by the 2022 Memorial Cup Saint John Host Company Inc. This outdoor arena will be the first recreational facility of its kind in Saint John.

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

A number of City departments have been involved in this project that has resulted in the preparation of this report, including: Risk Management, Infrastructure Development, Utillities & Infrastructure/Saint John Water, and Public Works & Transportation. The General Counsel Office has prepared the construction license for City-owned land and the amended and restated indenture to facilitate the placement of the Arena on land owned by the SJPA.

ATTACHMENTS

1. Restated Easement Agreement #388 with the SJPA
2. Construction License Agreement

PID #55151351 Easement: #388

Schedule “A” – York Point Area
Schedule “B” – Long Wharf Area
Schedule “C” - Lower Cove Loop Area
Schedule “D” – Memorial Cup Ball Hockey Arena Area
Schedule “E” - TAC S2-26

THIS AMENDED AND RESTATED INDENTURE made as of the 1st day of December, 2012

BETWEEN:

SAINT JOHN PORT AUTHORITY a corporation having its registered office at Saint John, New Brunswick, as agent of Her Majesty in right of Canada, (the **"Authority"**)

AND:

THE CITY OF SAINT JOHN, having its City Hall at 15 Market Square, Saint John, New Brunswick, a body corporate by Royal Charter, confirmed and amended by Acts of the Legislative Assembly of the Province of New Brunswick, (the **"Grantee"**),

WHEREAS the Authority was incorporated by Letters Patent dated May 1, 1999, under the *Canada Marine Act* (the **"Act"**),

AND WHEREAS the land and premises described in Schedules "A", “B”, ~~and~~ “C”, and “D” are federal real property under the management of the Authority pursuant to its Letters Patent and the Act,

AND WHEREAS the Authority is authorized to grant easements with respect to the premises as agent of Her Majesty in right of Canada as contemplated hereby,

AND WHEREAS the Grantee has constructed and currently maintains and operates a recreational parkland and pedestrian trail and walkway and associated structures and facilities “Harbour Passage Du Port” (York Point to Strait Shore) over, along and adjacent to the said lands described in Schedule “A” (Easement Lands) for use by the general public;

AND WHEREAS by instrument made as of the 1st day of December 2002 and registered in the Saint John County Registry Office on September 14, 2004 as No. 19093096, the Authority granted to the Grantee an easement and right of way in respect of the premises in Schedule “A” for the purposes of “Harbour Passage Du Port” (York Point to Strait Shore) on the terms therein set out;

AND WHEREAS the Grantee has constructed and currently maintains and operates a recreational parkland and pedestrian trail and walkway and associated structures and facilities “Harbour Passage du Port” (Long Wharf) over, along and adjacent to the said lands described in Schedule “B” (**"Easement Lands"**) for use by the general public;

AND WHEREAS the Grantee intends to construct, maintain and operate a recreational parkland and pedestrian trail or walkway and associated structures and facilities "Harbour Passage Du Port" (Lower Cove Loop) over, along and adjacent to the said lands described in Schedule "C" (Easement Lands) for use by the general public;~~,~~

AND WHEREAS the Authority has agreed to grant to the Grantee easements and rights of way in respect of the premises in Schedules “A”, “B” and “C” for the purposes of the “Harbour Passage Du Port” on the terms set forth herein;

AND WHEREAS the Grantee intends to maintain and operate a recreational ball hockey arena (the “Arena”), constructed as a legacy gift of the Memorial Cup by a third party and donated to the Grantee, generally in the York Point area;

AND WHEREAS the Authority has agreed to grant to the Grantee easements and rights of way in respect of the premises in Schedule “D” (Easement Lands) for the purposes of the “Memorial Cup Ball Hockey Arena” on the terms set forth herein;

NOW THEREFORE THIS INDENTURE WITNESSETH as follows:

GRANT

1.(1) In consideration of the sum of $1.00 of lawful money of Canada payable by the Grantee to the Authority, and other good and valuable consideration, the Authority hereby grants to the Grantee, its successors and assigns, an easement and right of way on and over the lands and premises described in Schedules "A", “B”, ~~ and~~ “C”, and “D”.

1.(2) The easement and right of way herein granted shall be effective for the period from December 1, 2012 to November 30, 2027.

1.(3) The Grantee shall use the Easement Lands described in Schedules “A”, “B”, and “C”, only for the purposes of the “Harbour Passage Du Port”, namely, for the purpose of a public walking trail and entering upon, laying down, constructing, installing, operating, maintaining, inspecting, patrolling, altering, removing, replacing, reconstructing and repairing the “Harbour Passage Du Port” and to have the right of ingress and egress across and upon the Easement Lands at the specific points shown on plan G-II-593 dated Aug. 7, 2002 attached to Schedule "A” and on plan Dwg. No. 17240 dated Oct. 10, 2017 attached as Schedule “B”, and on plan Dwg. No. S17187 dated Aug. 4, 2017 attached as Schedule “C”.

1.(3.1) The Grantee shall use the Easement Lands described in Schedule “D” only for the purpose of the “Memorial Cup Ball Hockey Arena”, namely, for the purpose of a recreational ball hockey arena and entering upon, laying down, constructing, installing, operating, maintaining, inspecting, patrolling, altering, removing, replacing, reconstructing and repairing the “Memorial Cup Ball Hockey Arena”, whether directly or through a third party, and to have the right of ingress and egress, whether directly or through a third party, across and upon the Easement Lands at the specific points shown on drawing C03 dated January, 2022 attached to Schedule "D”.

1.(4) The Grantee may enter upon and cross the Easement Lands and lands of the Authority adjacent to the Easement Lands for the purpose of gaining access to and egress to and from the Easement Lands whether in cases of emergency, or for the purpose of construction, operation, maintenance, repair and replacement of “Harbour Passage Du Port” or “Memorial Cup Ball Hockey Arena”, as the case may be, always however, making good or repairing promptly thereafter, all damage to lands occasioned by such use.

1.(5) The grant herein is subject to existing easements and rights of way and the Authority reserves the right to grant easements or rights of way over the Easement Lands to other parties provided that such easements and rights of way do not materially affect the use of the easement herein by the Grantee.

COVENANTS

2. The Grantee covenants and warrants that:

(a) it will clear the Easement Lands and keep them cleared of any trees or other natural growth, buildings, structures or obstructions which in the reasonable opinion of the Grantee may interfere with the exercise of any rights granted herein;

(b) all installations, developments or modifications to the Easement Lands

shall be approved by the Authority prior to the commencement of any work, will be subject to review and if necessary reverting back to its original state at the cost of the Grantee if the such installations, developments or modifications contravenes any applicable federal or provincial statutes, rules, orders, and regulations that may affect the Easement Lands;

(c) notwithstanding clause 5(c) at the point where Harbour Passage Du Port crosses the roadway established by the Grantor for the purpose of vehicle access to and from Long Wharf, the Grantee shall install and maintain a crosswalk posted with signage in accordance with standards established by the Transportation Association of Canada: "Pedestrian Crossing Control Guide" December 2012 S2-26 figures RA-4L and RA-4R as shown on Schedule "ED"; installation of crosswalk with signage to be completed no later than June 30, 2018;

(d) it will install, maintain and use gates and fences which now or hereafter shall cross the Easement Lands;

(e) it will install and maintain all its signage on the Easement Lands in both official languages, English and French; and

(f) generally, it may do on the Easement Lands all acts necessary or incidental to the use as a public walking trail and/or a ball hockey arena, as the case may be.

TERMINATION

3.(1) In the event the Grantee shall not have commenced construction or operations on the Easement Lands described in Schedule "C" for the laying out of the "Harbour Passage Du Port" by December 31, 2018, the Authority may, at its option thereafter terminate the easement and right of way hereby granted by giving to the Grantee one (1) month's prior written notice stating the day on which the grant herein shall terminate, and all rights of the Grantee hereunder shall thereupon cease and expire, and the Grantee agrees to execute and file in the appropriate public offices such documents as the Authority reasonably requires to give effect to such termination.

3.(2) If the Grantee abandons the Easement Lands or ceases to use the said lands for the purposes of the "Harbour Passage Du Port" or a "Ball Hockey Arena", as the case may be, in whole or in part, the Authority may, at its option, terminate the easement and right of way hereby granted by giving to the Grantee one (1) month's prior written notice stating the day on which the grant herein shall terminate, and all rights of the Grantee hereunder shall thereupon cease and expire, and the Grantee agrees to execute and file in the appropriate public offices such documents as the Authority reasonably requires to give effect to such termination.

3.(3) On termination of the easement and right of way granted herein, the Grantee shall forthwith restore the Easement Lands, so far as is practicable, to the same condition as it was prior to the entry and use of the Grantee.

4. Where the Authority has required the Grantee, as a condition of approving the abandonment, maintenance, remediation or other measures with respect to the "Harbour Passage Du Port" or "Ball Hockey Arena", as the case may be, notwithstanding the termination of theise Easements, the Grantee shall have full right and license at any time where necessary thereafter, to enter upon the Easement Lands with persons, machinery and material, for the purpose of carrying out such obligations, but always restoring or repairing however, any damage to the lands of the Authority thereby occasioned, and where required, paying compensation for damages to the Authority arising from such entry.

FURTHER COVENANTS

5. Grantee covenants and agrees with the Authority:

(a) to promptly pay compensation to the Authority for all damages suffered by the Authority as a result of the "Harbour Passage Du Port" or "Ball Hockey Arena", other than damages resulting from the gross negligence or

willful misconduct of the Authority, including but not limited to damages to the lands adjacent to the Easement Lands;

(b) to indemnify and save harmless the Authority, its officer, directors, employees, workmen, agents and contractors from all loss, damage or injury, of any nature, kind or description whatsoever, or otherwise by reason of the activities of the Grantee, its employees, servants or agents, or those permitted by the Grantee to use the Easement Lands, on or about the Easement Lands, whether caused by the negligence of the Grantee, its employees, workmen or agents, or otherwise, and from all damages, claims, demands, actions, suits or other proceedings by whomsoever made, brought or prosecuted in any manner, based upon or arising out of or connected with this easement and right of way or anything done or maintained or purported to be done or maintained in any manner thereon;

(c) where "Harbour Passage Du Port" as depicted on Schedules "A", "B" and "C" crosses any of the Authority's points of access to Long Wharf Terminal and Lower Cove Terminal, these points of access being the Authority's roadways to working port operations and as such have heavy truck and vehicle traffic, the Grantee will ensure that the necessary signage, in both French and English, is erected to clearly alert any and all users to exercise caution when crossing the Authority's points of access or continue as originally set out, or the Grantee may install pedestrian traffic control lights in lieu of the above mentioned signage, and the Grantee hereby expressly agrees that any use of the "Harbour Passage Du Port", specifically any roadways or areas immediately adjacent to any roadways, is subject always to paragraph 11 herein;

(d) that the Grantee shall not extend Harbour Passage Du Port along Charlotte Street southward of the intersection with Broad Street.

(e) not to carry out any installation or operation on that portion the Easement Lands where Maritime and Northeast Pipeline has installed an underground natural gas pipeline, without receiving prior written approval from Maritime and Northeast Pipeline for any proposed installation or operation, and a copy of such written approval shall be provided to the Authority in advance of such installation or operation commencing; and

(f) to ensure that the Authority has full access at all times to the electrical and telephone utility pits located on the Easement Lands and that any landscaping on or near these utility pits is the sole responsibility of the Grantee.

6. The amount of any compensation for damages payable to the Authority under this grant shall be as mutually agreed between the Authority and the Grantee, but failing such agreement shall be determined pursuant to the paragraph 26 herein.

7.(1) The Grantee shall pay all taxes, charges, rates and assessments of any description whatsoever which are assessed or levied against the Grantee's interest in the Easement Lands and all other improvements which are placed or constructed over, across, under, or along the land pursuant to this indenture, and indemnify and save harmless the Authority from all rates, taxes, liens, assessments and levies of any description whatsoever that may be imposed, charged, claimed or levied by any authority, body, workman, contractor or supplier by reason of the construction or presence of the said "Harbour Passage Du Port" and "Memorial Cup Ball Hockey Arena" and appurtenances thereto on the Easement Lands or of the privileges granted hereunder.

7.(2) The Grantee will comply with all applicable federal and provincial statutes, rules, orders and regulations and municipal bylaws applicable thereto in which the Easement Lands are located, including but not limited to the *National Energy Board Act* with regard to the natural gas pipeline located in the immediate vicinity of the Easement Lands.

8. In performing and observing the covenants and conditions on its part to be kept, performed and observed, the Grantee shall and may peaceably hold the easement and rights hereby granted without hindrance by the Authority, its officers and employees.

9. No covenant, condition, warranty or other requirement contained in these easements and rights of way can be waived except by the written consent of the Authority, and forbearance or indulgence by the Authority in any regard whatsoever shall not constitute a waiver of any covenants, conditions, warranties or any other requirement to be performed by the Grantee to which the same may apply and until complete performance by the Grantee of said covenant, condition, warranty or other requirement, the Authority shall be entitled to invoke any remedy available to the Authority under this instrument, or by law or otherwise, despite said forbearance or indulgence.

10. The Grantee shall not have any claim against the Authority for loss or damage to the said "Harbour Passage Du Port" and "Memorial Cup Ball Hockey Arena" or other property of the Grantee, its employees, workmen or agents, save to the extent that the Authority is negligent; and in no event shall the Authority's employees, workmen, agents and contractors or any of its affiliated companies or persons be liable for any special, incidental or consequential loss or damage.

11. The Grantee hereby waives any claim or demand whatsoever and howsoever arising against the Authority at any time as a result of the Grantee's activities and/or operations carried out upon or involving the use of "Harbour Passage Du Port" or "Memorial Cup Ball Hockey Arena" or other property of the Authority and further covenants and agrees to indemnify and save harmless the Authority from and with respect to any claims or demands of third parties whatsoever, whether for injuries to persons, loss of life or damage to property, including pollution, arising out of the use of the Easement Lands for "Harbour Passage Du Port" or "Memorial Cup Ball Hockey Arena", and other property of the Authority, in relation to use of the aforementioned areas by the general public, and without limiting the generality of the foregoing, including any and all claims that may arise in connection with the installation, operation, maintenance and or use of the Easement Lands howsoever occurring, including any claim based on public or private nuisance.

12.(1) The Grantee will advise the Authority in writing prior to doing work of any nature upon the Easement Lands excepting work carried out in the ordinary course of business and emergency situations, as required by the relevant statutes, codes and regulations; including but not limited to the ***National Energy Board Act,*** and only after approval in writing of such work will the Grantee proceed and then only on the terms and conditions approved by the Authority.

12.(2) The Grantee shall as soon as is reasonably possible advise the Authority of entry on the land made necessary by any emergency situation.

13. The Authority makes no warranty as to its title to the land or to its right to grant the rights herein conveyed and all warranties that are or might be implied by law are specifically excluded, and in addition, this grant conveys no riparian rights to the Grantee.

14. The Grantee may not sell, assign or grant any interest in, or right to these easements and rights of way without the expressed written consent of the Authority.

15. The Grantee acknowledges and agrees that the Authority, either itself or through its officers or agents, has not made, and that the Grantee has not relied upon, any representations from the Authority, its officers or agents as to:

(a) the suitability of the Easement Lands for use by the Grantee;

(b) the existence, absence or nature or extent of any pollution on or of the Easement Lands; or

(c) the need to take any remedial action in relation to any pollution on or of the Easement Lands.

16. The Grantee acknowledges and agrees that it has been afforded all reasonable opportunity to inspect the Easement Lands and all relevant documentation in respect thereof and to carry out such audits, investigations, tests and surveys as it considers reasonably necessary to ascertain:

(a) the suitability of the Easement Lands for use by the Grantee;

(b) the existence, nature and extent of any pollution on the Easement

Lands; and

(c) the need to take any remedial action in relation to any pollution on the Easement Lands;

and the Grantee has independently made all such inspections, audits, investigations, tests and surveys as it regards as being necessary for the above purposes.

17. It is understood and agreed that the Easement Lands are available to the Grantee on an "as is" basis.

18. The Grantee hereby assumes any and all duties, obligations or liabilities under any relevant law in respect of the Easement Lands, including, but not limited to, any costs, expenses or liabilities for any remedial action for any pollution of the Easement Lands as caused by the Grantee or those for which it is responsible in law including its employees, agents and contractors.

19. The Grantee hereby releases and holds harmless the Authority in respect of all and any costs, expenses, damages, losses or liabilities that may be incurred or suffered by the Grantee by reason of or resulting from or in connection with or arising in any manner whatsoever out of:

(a) the Easement Lands not being suitable for use by the Grantee;

(b) the Easement Lands being, or being found to be at any time, polluted or contaminated; or

(c) the need to take any remedial action and the taking of such action as a result of such pollution or contamination on or of the Easement Lands.

20.(1) The Grantee covenants and agrees not to cause anything to be done on or about the Easement Lands resulting in pollution, contamination or environmental damage to the Easement Lands or adjoining lands of the Authority.

20.(2) The Grantee covenants and agrees, except to the extent otherwise provided, to promptly report to the Authority all spills and or leaks of any substance which may be capable of damaging or contaminating the premises and to properly and thoroughly remove all such spills or leaks for which the Grantee is responsible.

20.(3) The Grantee further covenants and agrees to be responsible for and bear the cost of any clean-up, removal and disposal of contaminated materials, including soil and water, toxic or otherwise, and restoration of damaged environment or habitat, where the same arises during *and/or* after the existence of this easement and results from the activities of the Grantee, or those for whom it is responsible in law including its employees, agents and contractors, such clean-up, removal *and/or* disposal will be to the satisfaction of the Authority.

20.(4) If the Grantee fails to clean up pollution, environmental or habitat restoration, the Authority may do so without notice to the Grantee and the Grantee shall reimburse the Authority for all costs, charges and expenses in connection therewith upon demand.

20.(5) The determination of whether or not materials are contaminated, or environmental or habitat damage has occurred or may occur shall be pursuant to current applicable environmental laws and regulations and it is expressly agreed that this paragraph 20 survives the term of the easement.

21. The Grantee shall facilitate the Authority in carrying out pre-occupancy, post-occupancy and periodical environmental audits of the Easement Lands and the operations of the Grantee in accordance with Authority policy as amended from time to time.

AUTHORITY'S COVENANTS

22. The Authority covenants and agrees with the Grantee not to store or use any inflammable substance or to burn or permit the burning of anything on the Easement

Lands.

INSURANCE

23. The Grantee will obtain comprehensive general liability insurance (the "Liability Insurance") as follows:

(a) the Liability Insurance should total an amount of not less than $10 million inclusive limits (or such greater amount as the Authority may reasonably require) and subject to a deductible of not more than $5,000, payable by the Grantee, for any one loss or occurrence for bodily, injury, death or damage to property (including loss of use or occupation);

(b) the Liability Insurance will cover all claims and demands for injury to or death of persons or damage to property which may be claimed to have occurred and will include, but not limited to, broad form property damage, occurrence property, owner's protective, products, completed operations, personal injury, contingent employer's, non-owned automobile, blanket contractual liability, and all risk tenants legal liability coverage, owners' and contractors protective liability and punitive damage and without any exclusion for sudden and accidental pollution howsoever caused or arising, subject to 120 hours discovery by the Grantee and, following discovery, 120 hours' notice to the Grantee's insurers;

(c) the Liability Insurance will provide cross liability coverage for each named insured for liability to every other named insured as if each named insured were insured under a separate policy.

24.(1) The Grantee will obtain such other insurance as the Authority, from time to time, may reasonably require in such form, amount, and for insurance risks, as a prudent tenant would insure.

24.(2) All the insurance:

(a) will name, as additional named insured, the Authority and the Authority as agent for Her Majesty the Queen in right of Canada and the Authority's directors, officers and employees with regard to the operations of the Grantee and for those whom in law it is responsible;

(b) will not be subject to invalidation (as regards the interest of the Authority, its directors, officers and employees), by reason of any breach or violation of any warranties, representations, declarations or conditions;

(c) will be at the Grantee's expense and will be primary, non-contributing with, and not excess of, any other insurance available to the Authority;

(d) will be placed with underwriters authorized to do business at the demised premises and acceptable to the Authority, acting reasonably;

(e) will be an endorsement issued by the underwriters of the Insurance, in a form acceptable to the Authority, acting reasonably; and

(f) will provide for sixty (60) days' prior notice to the Authority by mail (prepaid, registered, and return receipt requested) in the event of cancellation or material change that reduces or restricts the Insurance.

25. The Grantee:

(a) will maintain the Insurance in full force and effect at all times during the term of this Lease and at all other times during which the Grantee is in occupation of the demised premises; and

(b) when requested by the Authority from time to time to do so, will provide the Authority with copies of the endorsement issued by the underwriters of the Insurance, providing evidence of the Insurance and in form satisfactory to the Authority.

26.(1) Any dispute between the parties to this agreement concerning the interpretation of any provision of this easement, or concerning any matter or thing done or omitted to be done hereunder by a party hereto, shall be settled by arbitration.

26.(2) Either party may notify the other party in writing of its desire to submit a dispute to an arbitral tribunal and shall on such notice name its arbitrator to the tribunal.

26.(3) Within ten clear days of receipt of such notice, the other party shall in writing notify the party giving the notice of the name of its arbitrator to the tribunal.

26.(4) The two arbitrators chosen shall forthwith elect a third who shall be chairman of the tribunal and the award of the tribunal, or the majority of them, shall be made within thirty days of the appointment of the chairman.

26.(5) A party may appeal an award to the court on a question of fact or on a question of mixed fact and law.

26.(6) If either party shall neglect or refuse to name its arbitrator within the time herein limited, or if the two appointed arbitrators fail to agree upon a chairman within ten days of the appointment of the last of them, an application may be made to the Court of Queen' s Bench of New Brunswick for the appointment of such arbitrator or chairman, as the case may be.

26.(7) Each party shall pay the fees and disbursements of its arbitrator and the parties shall pay equally the fees and disbursements of the third arbitrator.

26.(8) The provisions of the *Arbitration Act,* Chapter A-I0.1, R.S.N.B., 1973 as amended, shall apply to any arbitration under this agreement.

26.(9) Except where a matter is reserved to the sole right, discretion or opinion of one of the parties hereto, the parties may by mutual agreement submit any matter arising hereunder to arbitration in accordance with this paragraph 26 and the notice and timing requirements described in this paragraph shall apply.

27. All notices to be given pursuant to this Easement may be given by personal service or by delivery courier, or by mail postage prepaid by registered mail to the following addresses, in the case of the Authority to:

SAINT JOHN PORT AUTHORITY
111 Water Street
Saint John, NB E2L 0B1

Attention: President and Chief Executive Officer

and in the case of the Grantee to:

THE CITY OF SAINT JOHN
P.O. Box 1971
Saint John, NB E2L 4L1

Attention: The City Clerk

28. This Indenture shall enure to the benefit of and be binding upon the parties hereto and their respective successors and assigns.

IN WITNESS WHEREOF the parties hereto have caused these presents to be duly executed as of the day and year first above written.

SIGNED SEALED AND DELIVERED	)	**SAINT JOHN PORT AUTHORITY**
	)	
in the presence of	)	
	)	By: _____
	)	
	)	

) And: _____
)
)
) **THE CITY OF SAINT JOHN**
)
)
) _____
) Mayor
)
)
) _____
) City Clerk
)
) Common Council Resolution:
) _____
)
)

PROVINCE OF NEW BRUNSWICK

COUNTY OF SAINT JOHN

I, Jonathan Taylor, of the Town of Quispamsis, in the County of Kings and Province of New Brunswick, MAKE OATH AND SAY:

1. THAT I am the City Clerk of the City of Saint John and have custody of the Common Seal hereof.

2. THAT the Seal to the aforegoing instrument affixed is the Common Seal of the City of Saint John and that it was affixed by Order of the Common Council of the said City.

3. THAT the signature "Donna Noade Reardon" to the said instrument is the signature of Donna Noade Reardon, Mayor of the said City, and the signature "Jonathan Taylor" thereto is my own signature.

4. THAT we are the proper officers to sign the aforegoing instrument on behalf of the City of Saint John.

SWORN TO BEFORE ME)
at the City of Saint John, in the)
County of Saint John and Province)
of New Brunswick this _____)
day of _____, 2022.)
)
)
_____) _____
) Jonathan Taylor
Commissioner of Oaths)
Being a Solicitor)

PROVINCE OF NEW BRUNSWICK

AFFIDAVIT OF CORPORATE EXECUTION

I, _____, of the City of Saint John, in the County of Saint John, and Province of New Brunswick, MAKE OATH AND SAY AS FOLLOWS:

1. That I am the President and Chief Executive Office of Saint John Port Authority, a Port Authority incorporated by Letters Patent dated May 1, 1999 issued pursuant to the *Canada Marine Act*, a party to the foregoing indenture (the "Authority").

2. That the President and Chief Executive Officer and the Corporate Secretary of the Authority are authorized to execute documents in the name and on behalf of the Authority.

3. That the seal affixed to the said indenture is the corporate seal of the said Authority and was so affixed by authority of the Directors thereof.

4. That the signature "_____" to the foregoing indenture is the signature of _____, the Corporate Secretary of the Authority and the signature "_____" is in the proper handwriting of me, this deponent.

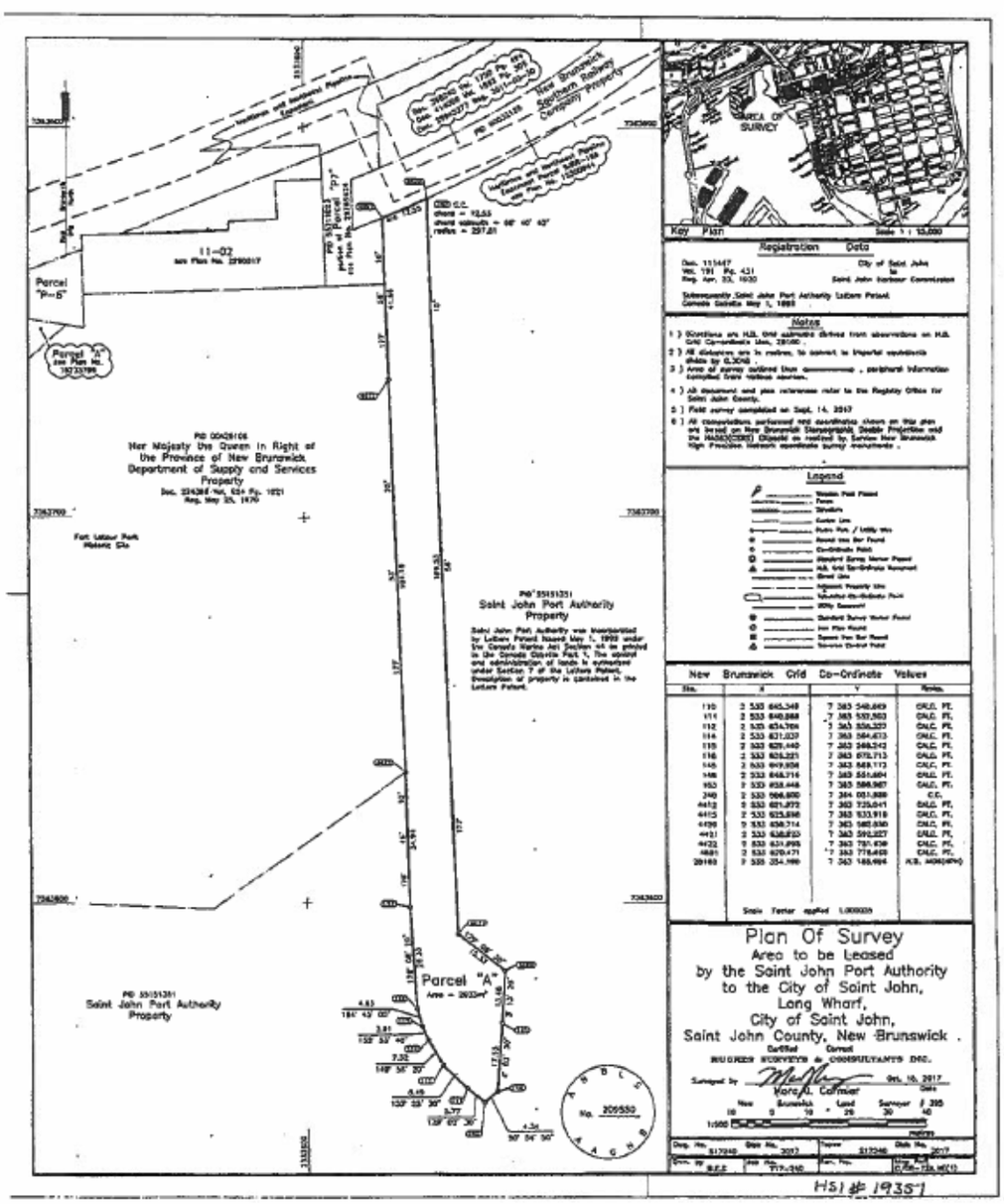
5. The signatures were subscribed to the foregoing indenture and the corporate seal affixed thereto for the purpose of execution on behalf of the Authority.

SWORN TO BEFORE ME)
at the City of Saint John, in the)
County of Saint John and Province)
of New Brunswick this _____)
day of _____, 2022.)
)
)
_____) _____
)
Commissioner of Oaths)

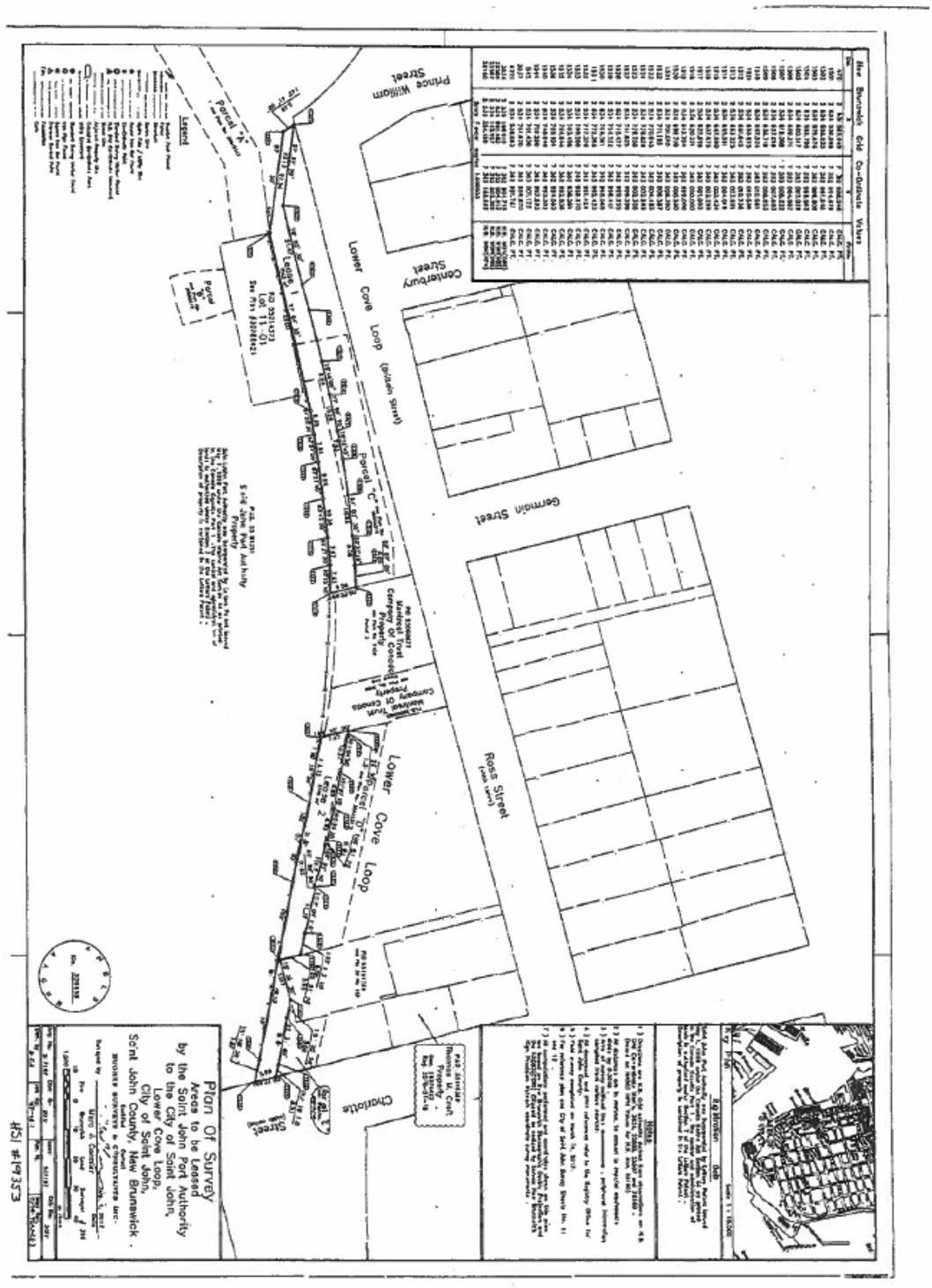
SCHEDULE “A”

All those certain lands in the City of Saint John, County of Saint John and Province of New Brunswick shown on a “Plan of Survey (Parcel ‘A’) Easement Requirements For Harbour Passage York Point to Strait Shore Crossing Saint John Port Authority City of Saint John County of Saint John Province of New Brunswick” dated Aug. 7, 2002 Saint John Port Authority Plan No. G-11-593 attached to an Indenture made as of the 1st day of December, 2002 between the Saint John Port Authority and The City of Saint John exempted by the Development Officer on September 10, 2002 pursuant to Section 48(1)(e) of the *Community Planning Act* and registered in the Saint John County Registry Office on September 13, 2014 as No. 19093096.

SCHEDULE “B”


Plan Of Survey
Area to be Leased
by the Saint John Port Authority
to the City of Saint John,
Long Wharf,
City of Saint John,
Saint John County, New Brunswick .
Parcel "A"
Area = 2933m²
Parcel "P-5"
PID 00028106
Her Majesty the Queen in Right of the Province of New Brunswick
Department of Supply and Services
Property
PID 55151351
Saint John Port Authority
Property
Saint John Port Authority
Property
Fort Latour Park
Historic Site
Key Plan
Registration Data
Notes
Legend
New Brunswick Grid Co-Ordinate Values
Surveyed by
Marc A. Cormier
Dec. 19, 2017
CARLETON SURVEYS & CONSULTANTS INC.
No. 209550
HSI # 19357

SCHEDULE “C”


Plan Of Survey
Areas to be Leased
by the Saint John Port Authority
to the City of Saint John,
Lower Cove Loop,
City of Saint John,
Saint John County, New Brunswick.
Lower Cove Loop (Water Street)
Prince William Street
Canterbury Street
Germain Street
Ross Street
Charlotte
Parcel "A"
Parcel "B"
Parcel "C"
Legend
Key Plan

SCHEDULE "D"
EASEMENT AREA FOR BALL HOCKEY ARENA

[insert drawing C03 dated January 2022 / depiction of easement area]

SCHEDULE "ED"

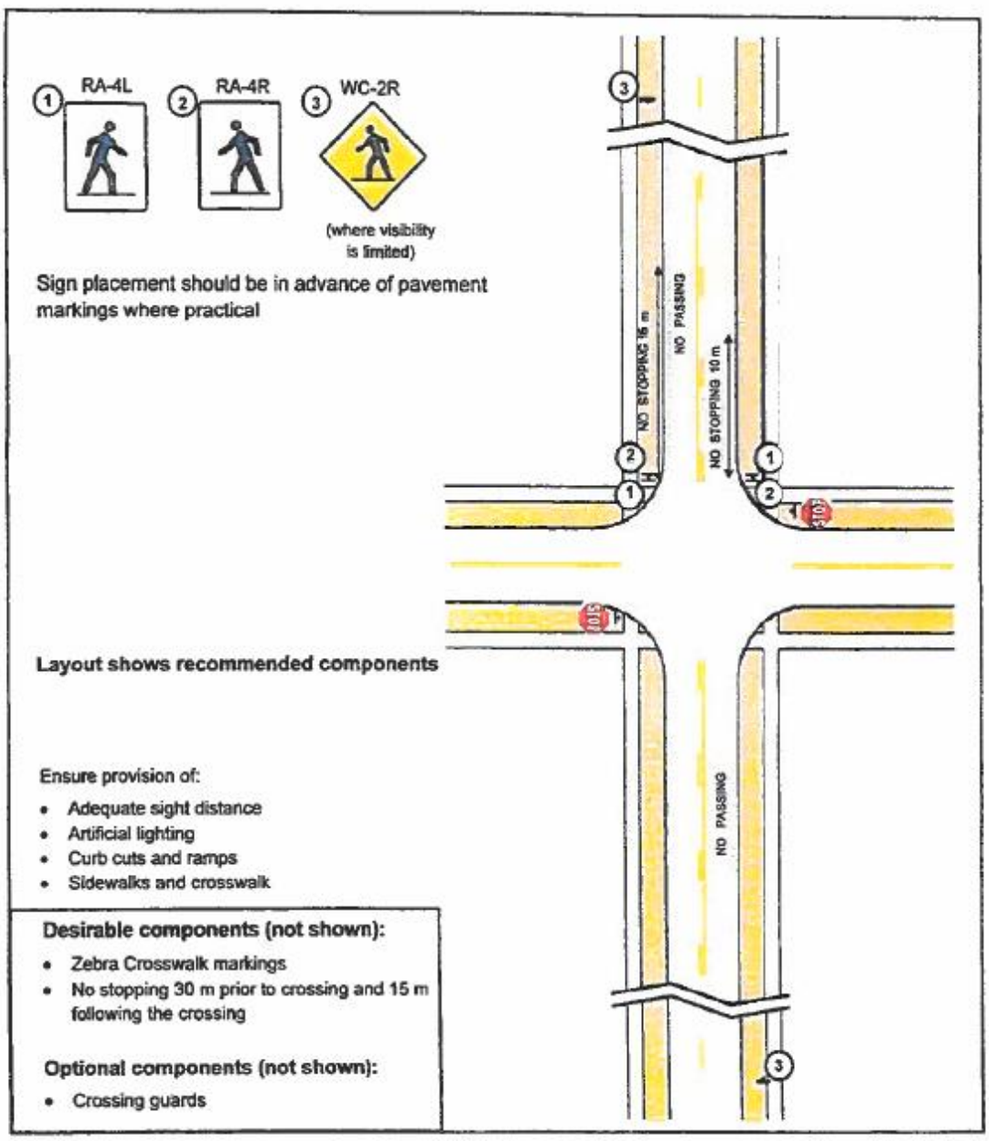


Figure 7: GM1 GENERAL CASE - Crosswalk with side-mounted signs 2-lane, 2-way.

Parcel Identifier: **PID Number 55209746**

THIS LICENSE AGREEMENT made as of **April 19, 2022** (the "**Effective Date**").

BETWEEN:

THE CITY OF SAINT JOHN, having its offices at the City Hall Building at 15 Market Square, Saint John, New Brunswick E2L 4V1, a body corporate by Royal Charter, confirmed and amended by Acts of the Legislative Assembly of the Province of New Brunswick ("**Licensor**")

OF THE FIRST PART

- and –

2022 MEMORIAL CUP SAINT JOHN HOST COMPANY INC., a corporation under the laws of the Province of New Brunswick, having its registered office at 99 Station St, Suite 200, Saint John, N.B., E2L 4X4 ("**Licensee**")

OF THE SECOND PART

WHEREAS Licensor is the owner of the lands (the "**Lands**"), as further described in **Schedule "A"**;

WHEREAS Licensee has asked for permission and license to enter into and upon and exit from the Lands for the sole purpose of setting up and operating a Ball Hockey Arena, hereinafter the "Outdoor Arena" (the "**Purpose**") under the terms and conditions of this License; and

WHEREAS Licensor has, at a meeting of its Common Council held April 19, 2022 given permission and license for Licensee to engage in such Purpose upon the Lands as shown on **Schedule "A"** (the "**Licensed Area**") upon the terms and conditions set out below (the "**License**").

NOW THEREFORE IT IS HEREBY AGREED AND WITNESSED that the Parties, for and in consideration of Licensor granting approval to Licensee to engage in such Purpose upon the Lands, as well as other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, agree as follows:

ARTICLE I
DEFINITIONS

1.1 Definitions

In this License:

(a) "**Business Day**" means any day other than a Saturday, Sunday, statutory holiday or civic holiday in the Province of New Brunswick;

(b) "**Effective Date**" means the date first set out above;

(c) "**Lands**" means the lands described in Paragraph 1 of the Preamble;

(d) "**License**" means this agreement and includes any riders and schedules hereto and shall also include any agreements entered into which have the effect of amending this agreement from time to time;

(e) "**License Fee**" means the fee set out in Section 2.2;

(f) "**Licensee**" includes Licensee and its successors and assigns;

(g) "**Licensed Area**" means the area of the Lands described in Paragraph 3 of the Preamble;

(h) "**Party**" means a party to this License;

(i) "**Purpose**" means the purpose described in Paragraph 2 of the Preamble; and

(j) "**Term**" means the period set out in Section 3.1.

ARTICLE II
TERMS OF THE LICENSE

2.1 Grant of License

Licensor hereby gives, subject to the terms, conditions, covenants, and provisions set out herein, non-exclusive permission and license to Licensee, its servants, agents, employees, contractors, and invitees to enter into and upon and exit from the Lands for the sole purpose of using the Licensed Area to **Construct an Outdoor Arena** during the Term, on the terms and conditions below.

2.2 License Fee

The fee payable by Licensee to Licensor in consideration of the License (the "**License Fee**") is **ten** dollars $**10** plus HST, **payable on April 25th, 2022.**

2.3 Further Applications

Licensor authorizes Licensee to make any such application as appropriate to construct the Purpose on Licensor's property.

2.4 Covenants of Licensee

Licensee hereby covenants and agrees with Licensor as follows:

(a) that it shall only use the Licensed Area for the Purpose and that it shall not use the Licensed Area for any other purpose;

(b) that it is responsible for providing any security required for the Licensed Area and its property;

(c) that it shall keep the area around the **Outdoor Arena** clean and tidy at all times and clean up daily in the immediate area surrounding the **Outdoor Arena**; and

(d) that it shall, at no expense to Licensor, obtain and maintain in full force and effect the insurance as set out in Section 4.1 and provide evidence thereof in a form and manner satisfactory to Licensee.

ARTICLE III
TERM AND TERMINATION

3.1 Term

The term of this License shall commence on **April 19, 2022** and end on **September 30, 2022** unless terminated earlier in accordance with the License or otherwise agreed between the Parties (the "**Term**").

3.2 Termination for Convenience

Either Party may, at any time, for its convenience and for any or no reason, terminate this License by giving fifteen (15) days' notice in writing to the other Party.

3.3 Termination for Insolvency

If Licensee is adjudged bankrupt, or if Licensee makes, attempts to make or gives notice of intention to make a proposal, arrangement or any general assignment for

the benefit of any insolvency, liquidation, or arrangement laws, or a receiver, receiver-manager, trustee, liquidator or similar person or official is appointed in respect of the whole or any part of its assets, or if, in Licensor's reasonable opinion, Licensee is unable to meet its liabilities generally as they come due, Licensor may, entirely without prejudice to any other right, remedy or claim it may have under this License or otherwise, immediately terminate this License by giving Consultant or any such receiver, trustee or similar official, written notice of termination.

3.4 Termination for Breach

If Licensee neglects or fails to perform the Purpose in accordance with this License or fails to observe and perform any provision of this License, Licensor may give Licensee written notice that Licensee is in default under this License and, entirely without prejudice to any other rights, remedies or claims it may have under this License or otherwise, terminate this License forthwith.

ARTICLE IV
INSURANCE AND INDEMNITY

4.1 Licensee's Insurance

Licensee shall throughout the Term, at its own cost and expense, take out and keep in full force and effect the following insurance:

(a) all risk insurance upon any portion of the Purpose to be executed within the boundaries of the Lands in an amount of not less than the full replacement cost thereon;

(b) commercial general liability with minimum limits of at least five million dollars ($5,000,000.00) for each occurrence or such higher limits as Licensor may reasonably require from time to time. This policy shall include:

(i) Licensor added as an additional insured;

(ii) inclusive limits for bodily injury and property damage;

(iii) personal injury liability;

(iv) contractual liability with respect to this License;
(v) premises, property, and operations;

(vi) completed operations;

(vii) a cross liability clause; and

(viii) a thirty (30) day written notice of cancellation to be

given to Licensor; and

(c) All policies shall be taken out with reputable and recognized insurers acceptable to, and shall be in a form satisfactory from time to time to, Licensor. Licensee agrees that Certificates of Insurance of each such insurance policy will be delivered to Licensor as soon as practicable after the placing of the required insurance, but in any event on the earlier of **May 2, 2022** or the commencement of the Purpose to be executed within the boundaries of the Lands, evidencing such policy of commercial general liability coverage on a per occurrence basis and containing a cross-liability clause and as otherwise set out above.

4.2 Loss or Damage

Licensor shall not be liable for any death or injury arising from or out of any occurrence in, upon, at, or relating to the execution of the Purpose, or damage to property of Licensee or of others located on the Lands, nor shall it be responsible for any loss of or damage to any property of Licensee or others from any cause whatsoever, except any such death, injury, loss or damage resulting from the negligence of Licensor, its agents, servants or employees or other persons for whom Licensor is in law responsible. Without limiting the generality of the foregoing, Licensor shall not be liable for any injury or damage to persons or property resulting from fire, explosion, steam, gas, electricity, water, rain, flood, snow or leaks from any part of the execution of the Purpose. All property of Licensee kept or stored on the property of Licensee shall be so kept or stored at the risk of Licensee only and Licensee shall indemnify Licensor and save it harmless from any claims arising out of any damages to the same, including, without limitation, any subrogation claims by Licensor's insurers. In no event shall Licensor be liable for any injury to Licensee, its agents, servants, employees, customers, and invitees or for any injury or damage to any property of Licensee, or to any property of any other person, firm or corporation on or about Licensee's property.

4.3 Indemnification by Licensee

Licensee will indemnify and save harmless Licensor from and against any and all claims, actions, damages, demands, suits or other proceedings, liability, and expenses incurred or suffered by or asserted against Licensor in connection with any breach, violation or non-performance by Licensee of any covenant, condition or agreement to be fulfilled, kept, observed or performed under this License or anything done or purported to be done in any manner hereunder. Licensee will also indemnify and save harmless Licensor from and against any and all claims, actions, damages, demands, suits or other proceedings, liability, and expenses incurred or suffered by or asserted against Licensor in connection to loss of life, personal injury, and/or damage to property arising from or out of the Purpose or occasioned wholly or in part by any act or omission of Licensee, its agents, servants, employees, contractors, licensees, or concessionaires or invitees. In

case Licensor shall, without fault on its part, be made a party to any litigation commenced by or against Licensee, then Licensee shall protect and hold it harmless and shall pay all costs, expenses, and solicitors' and counsel fees on a solicitor and client basis incurred or paid by them in connection with such litigation.

4.4 Notice of Cancellation of Insurance

Cancellation of the Certificate of Insurance shall stay in force and not be amended, cancelled, or allowed to lapse without thirty (30) days' notice in writing being given to Licensor. Said notice shall be deemed to have been satisfactorily given if provided in accordance with Section 0, with a copy delivered to the Office of the Manager, Risk Management for Licensor, City Hall, P.O. Box 1971, Saint John, New Brunswick, E2L 4L1, or mailed by prepared registered mail to that office.

4.5 Term of Insurance

The insurance coverage required under this License must remain in full force and effect during the period available to Licensee pursuant to this License to execute the Purpose.

4.6 Third Party Insurance

In the event Licensee contracts a third party to execute the Purpose within the boundaries of the Lands, Licensee must ensure that the third party, prior to commencement of that portion of the Purpose, complies with all obligations of Licensee in accordance with Sections 4.1, 4.2 and 4.3. Any failure by the third party to comply with the above-noted Sections shall be deemed to be a default of Licensee in its obligations to Licensor.

4.7 Termination of Failure to Obtain or Maintain Insurance

Licensor shall upon becoming aware of Licensee's failure to:

(a) obtain insurance as described in Section 4.1 or provided appropriate proof of insurance; and

(b) maintain insurance in force, as evidenced by notice from Licensee's insurer of its intent to cancel Licensee's insurance or other reasonable indication, have the right in its sole and absolute discretion, to forthwith terminate this License upon giving Licensee written notice in accordance with Section 6.1.

ARTICLE V
SECURITY

5.1 Security

N/A

ARTICLE VI
NOTICES

6.1 Address for Notice

Any notice or other communication required or permitted to be given hereunder shall be in writing and shall be delivered in person, transmitted by telecopy or similar means of recorded electronic communication or sent by registered mail, charges prepaid, addressed as follows:

(a) **if to Licensor:** The City of Saint John
General Counsel Office
City Hall
15 Market Square
Saint John, NB
E2L 4L1

email: generalcounsel@saintjohn.ca

with a copy to: The City Clerk

email: cityclerk@saintjohn.ca

(b) if to Licensee: **2022 Memorial Cup Saint John Host Company Inc.**
99 Station St., Suite 200
Saint John, N.B.
E2L 4X4

with a copy to: _____

email: _____

Any such notice or other communication shall be deemed to have been given and received on the day on which it was delivered or transmitted (or, if such day is not a Business Day, on the next following Business Day) or, if mailed, on the third Business Day following the date of mailing; provided, however, that if at the time of mailing or within three Business Days thereafter there is or occurs a labour dispute or other event that might reasonably be expected to disrupt the delivery of documents by mail, any notice or other communication hereunder shall be delivered or transmitted by means of recorded electronic communication as aforesaid.

6.2 Change of Address

Any Party may at any time change its address for service from time to time by giving notice to the other Party in accordance with this Section 6.2.

ARTICLE VII
GENERAL TERMS

7.1 Applicable Law and Jurisdiction

This License will in all respects be governed by and construed in accordance with the laws of the Province of New Brunswick and the federal laws of Canada applicable therein, excluding any choice of law provisions and without effect to principles of conflicts of law, regardless of the place of making or performance. New Brunswick courts shall have exclusive jurisdiction over all matters arising in relation to this License, and each Party accepts the jurisdiction of New Brunswick courts.

7.2 Compliance with Law and Policy

Each Party shall comply with applicable law and Licensor's policies, all as amended from time to time, and, notwithstanding anything in this License to the contrary, nothing in this License requires the Parties to do any act or refrain from doing any act which would result in a Party breaching Licensor's policies or violating (or becoming subject to any penalty under) any laws to which it is subject.

7.3 Additional Assurances

Licensor and Licensee each agree to do all such acts and provide such further assurances and instruments as may reasonably be required in order to carry out the provisions of this License according to their spirit and intent, provided that this Section 7.3 shall not be construed as obligating Licensor to amend or enact any by-law or regulation.

7.4 Assignment, Third Parties

Neither Party may sell, assign, or transfer this License, without the other Party's written consent, but no consent is required if the assignment: (a) results from the assignor's merger, consolidation, spin-off, split-off or acquisition, provided the assignment is limited to the assignor's survivor, subsidiary or successor; or (b) is to an affiliate or other related party capable of performing the assignor's duties and obligations under this License. Subject to the foregoing, this License will enure to the benefit of and will be binding upon Licensee, Licensor and their respective successors and permitted assigns. This License is not intended to be for the benefit of any person other than Licensor and Licensee. No other person or party, including will be considered a third party beneficiary of or otherwise entitled to any rights or benefits arising in connection with this License.

7.5 Amendment and Waiver

No amendment of this License is effective unless made in writing and signed by the duly authorized representatives of each of Licensor and Licensee. No waiver of any provision of this License is effective unless made in writing, and any such waiver has effect only in respect of the particular provision or circumstance stated in the waiver. A Party's failure at any time to enforce any of the provisions of, or any right or remedy available to it under, this License or at law or in equity, or to exercise any option provided, will not constitute a waiver of that provision, right, remedy or option or in any way affect the validity of this License. A Party's waiver of any default by either Party will not be deemed a continuing waiver, but will apply solely to the instance to which that waiver is directed.

7.6 General Duty to Mitigate

Licensor and Licensee shall at all times take commercially reasonable steps to minimize and mitigate any loss for which the relevant Party is entitled to bring a claim against the other Party pursuant to this License.

7.7 Cumulative Remedies

Except as otherwise set forth in this License, the rights, powers, and remedies of each Party set forth in this License are cumulative, are in addition to, and without prejudice to any other right, power or remedy that may be available to such Party under this License, and may be exercised concurrently or separately.

7.8 No Indemnity

Notwithstanding anything else in this License, any express or implied reference to Licensor providing an indemnity or incurring any other form of indebtedness or contingent liability that would directly or indirectly increase the indebtedness or contingent liabilities of Licensor, whether at the time of execution of this License or at any time during the Term, shall be void and of no legal effect. Licensee shall not have any claim against Licensor for loss or damage of any nature, kind or description whatsoever arising from the exercise or purported exercise of the License herein granted.

7.9 Counterparts and Execution

This License may be executed in any number of counterparts, in which case (a) the counterparts together shall constitute one License, and (b) communication of execution by fax or electronic transmission shall constitute good delivery. This License shall not be enforced or bind the Parties, until executed by all the Parties that are party to such License.

7.10 Miscellaneous

No provision of this License will be construed against or interpreted to the disadvantage of any Party, because that Party has or is deemed to have drafted the provision. The division of this License into articles, sections, subsections, and paragraphs and the insertion of headings and captions are for the Parties' convenience only, are not part of the text, and will not be deemed in any way to limit or affect the meaning, construction, or interpretation of this License. When used in this License, "including" means "including without limitation." In this License, all references to dollar amounts are in Canadian currency, unless otherwise expressly identified. Each Party is responsible for paying its own costs and expenses incurred in connection with the negotiation, preparation, and execution and delivery of this License. Those sections of this License that are intended by their nature to survive termination or expiration of this License will survive. The Parties hereto have agreed that this License and any other documents attached or relating to this License, as applicable, will be drawn up in the English language only.

7.11 Entire Agreement

This License contains the entire agreement between Licensor and Licensee regarding the subject matter of this License and supersedes any previous representations, statements, discussions, proposals, agreements, negotiations and understandings, regarding the same subject matter, including, for greater certainty. There are no agreements, promises, representations, warranties, terms, conditions or commitments regarding the subject matter of this License, except as expressed in this License. Neither Party has relied upon or been induced to enter into this License by any representations, statements, oral or written, discussions, proposals, agreements, negotiations or understandings not expressly contained in this License. Under no circumstances will such terms be considered an amendment to this License.

|Signature page follows|

SIGNED, SEALED & DELIVERED in the presence of:

THE CITY OF SAINT JOHN

_____

Mayor

_____

City Clerk

Common Council Resolution:
April 19, 2022

DATED on _____, 2022

2022 Memorial Cup Saint John Host Company Inc.

Per: _____

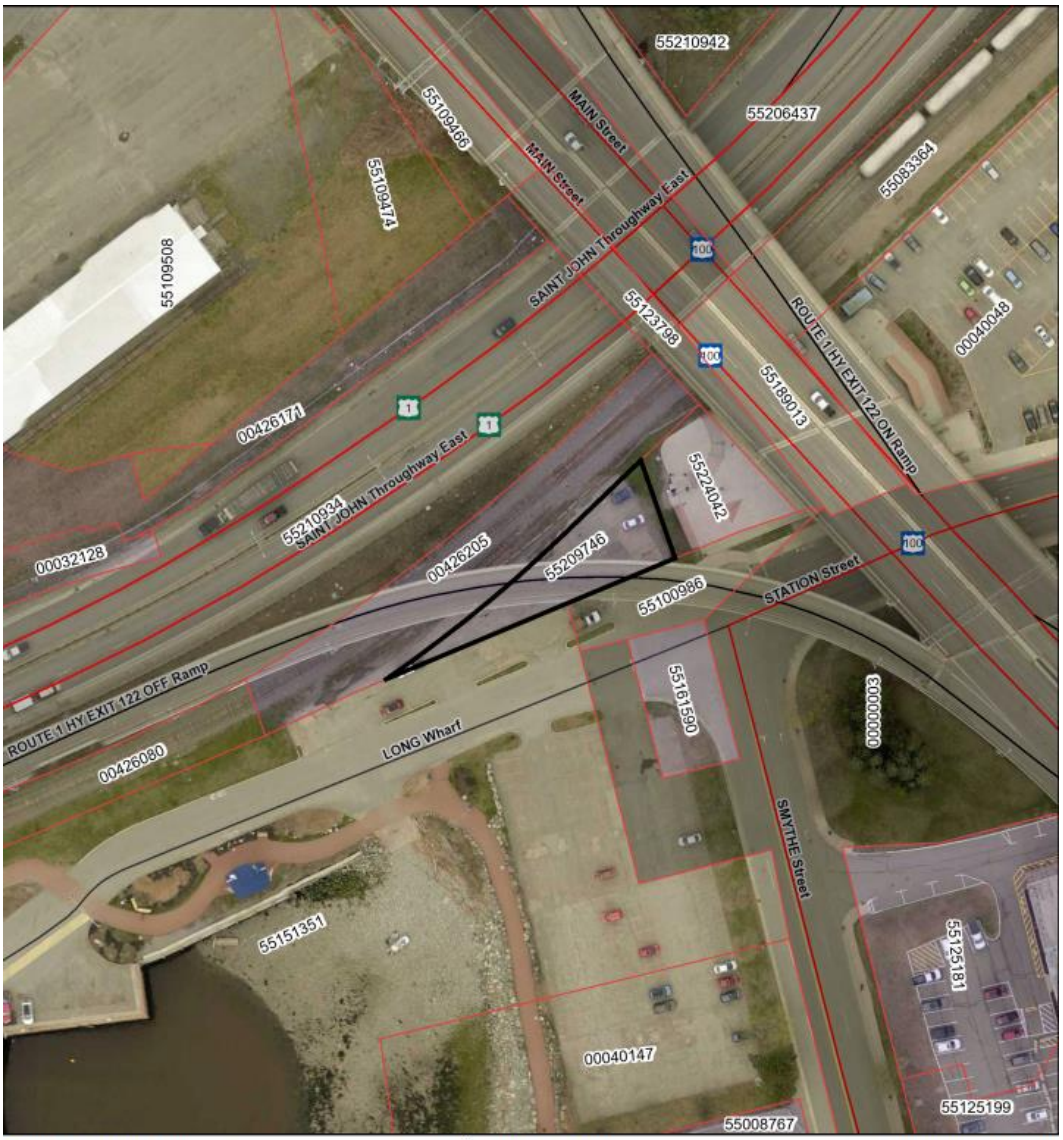
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DATED on _____, 2022.

SCHEDULE "A"
LANDS AND LICENSED AREA



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COMMON COUNCIL REPORT

M&C No.	2022-094
Report Date	March 24, 2022
Meeting Date	April 19, 2022
Service Area	Strategic Services

Her Worship Mayor Donna Noade Reardon and Members of Common Council

SUBJECT: **Internal Audit Services**

AUTHORIZATION

Primary Author	Commissioner/Dept. Head	City Manager	Chair of the Finance Committee
Jodie Forgie	***Kevin Fudge***	***John Collin***	***Councillor Gary Sullivan***

RECOMMENDATION

Be it resolved that Common Council approves the attached Internal Audit Plan for 2022.

EXECUTIVE SUMMARY

The purpose of this report is to provide the internal audit plan for the 2022 calendar year which includes two internal audit projects and to seek approval of the internal audit plan.

PREVIOUS RESOLUTION

Finance Committee – March 23, 2022 – "Finance Committee recommends the approval of the Internal Audit Plan for 2022 to Common Council".

REPORT

Internal audit is guided by the philosophy of adding value to improve the operations of the City. The internal audit services will support the strategic goals of the City, the ongoing projects and plans that the City is executing on and providing good governance and monitoring of internal controls.

The internal audit services reports administratively to the Chief Financial Officer and functionally through the Finance Committee to Common Council. Depending on the particular project being performed will impact who the stakeholders will be with the opportunity to provide benefit to diverse needs within the City.

Internal audit will provide updates to the Finance Committee on a regular basis on status of work, at minimum the summary of audit results and follow up on recommendations will be presented.

The internal audit plan includes two projects for the current year with high level reporting of the results to Finance Committee due in Q4 2022 and Q1 2023 respectively. The audits were selected out of a list of potential audit topics that have been compiled to date through meetings with senior leadership, research and review of existing plans. The two audits proposed are as follows:

Market Square Contract Compliance: The objective of this internal audit is to assess the Agreement requirements against current practices to identify compliance-based findings, improvement opportunities and general observations. This internal audit will continue to work towards enhancing contract management at the City. The internal audit will require the assistance from the General Counsel Office.

Health and Safety Audit (Saint John Water): The objective of the review is to assess the design of processes that comprise the Health & Safety Program for Saint John Water. The review will include Health and Safety governance activites, tools, systems, applicable policies and procedures, communications, training programs, and incident management processes and systems. The City recognizes the importance of keeping the workforce safe on the job and values the importance of ensuring that the Health & Safety Program meets the applicable requirements.

STRATEGIC ALIGNMENT

The recommendations are in alignment with following a strong governance process, providing accountability, Financial Stewards, and operational improvements.

SERVICE AND FINANCIAL OUTCOMES

Service outcomes are expected from the current audits being proposed and as such they have been categorized as a compliance audits.

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

Input received from all service areas and members of Finance Committee.

ATTACHMENTS

Internal Audit Plan 2022



The City of Saint John Internal Audit Plan

2022

About our services

- **Accomplishments in 2021:**
  - **Identified savings of approximately $250,000/year on contract management and ensuring services are in the best interest of the City**
  - **Mitigated risk of estimated shortfall of $1,000,000 for 2022 for health and dental plan and ensure the plan achieves the desired outcomes**
- Director reports administratively to the Chief Financial Officer and functionally to Common Council through the Finance Committee
- Establish annual audit plans with a focus on the five priority areas approved by Common Council for 2021-2026 term
- Perform examinations of the operations of the City and its affiliated bodies and report on status to Common Council
- Assist Common Council in their governance role of ensuring the accountability of the Public Service for the quality of stewardship over public funds and for the achievement of value for money in City operations

Our Purpose is to provide independent, objective assurance and consulting services designed to add value and improve the City's operations.

Our Mission is to enhance and protect organizational value by providing risk-based and objective assurance, advice, and insight. The internal audit service helps the City accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of governance, risk management, and control processes.

Our work in 2021

- Established the internal audit charter
- Created an audit universe of over 85 potential audit topics
- Determined the risk assessment process to identify priorities for audit
- Created the first audit plan
- Health and Dental Performance Audit
- Continue contract management work with TCC to implement budget changes

Getting better then yesterday

- Increase the risk register evolution
- Assess talent opportunities (outsourcing, recruitment)
- Identify and leverage tools for continuous auditing and continuous monitoring
- Continue to stay relevant through research, connections and education updates

Audit workplan for 2022

- Creation of the audit plan with 2 proposed audits
- Continue ongoing administration of reoccurring audit activities (ie: management action plans, planning/updating, consulting/advisory for the City)

Audit Area	High Level Scope of Work	Category of Audit	Budget Externally dollar	Budget-hours internally	Timeframe
Market Square Contract Compliance Audit	The objective of this internal audit is to assess the Agreement requirements against current practices to identify compliance-based findings, improvement opportunities and general observations. This internal audit will continue to work towards enhancing contract management at the City.	Compliance	$25,000-$35,000	100	June 2022 – October 2022

	The internal audit will require the assistance from the General Counsel Office.				
Health and Safety Audit (Saint John Water)	The objective of the review is to assess the design of processes that comprise the Health & Safety Program for Saint John Water. The review will include Health and Safety governance activites, tools, systems, applicable policies and procedures, communications, training programs, and incident management processes and systems. The City recognizes the importance of keeping the workforce safe on the job and values the importance of ensuring that the Health & Safety Program meets the applicable requirements.	Compliance	$30,000-$40,000 with 50% charged to Internal Audit and the other 50% charged to the Saint John Water Budget	100	September-December 2022

Management action plan follow up/planning/risk register updates	We will continue to build inventory of observations and management action plans to follow up and confirm that recommendations were implemented. The risk register will also go through continuous updates as business changes occur.	N/A	N/A	40	Ongoing



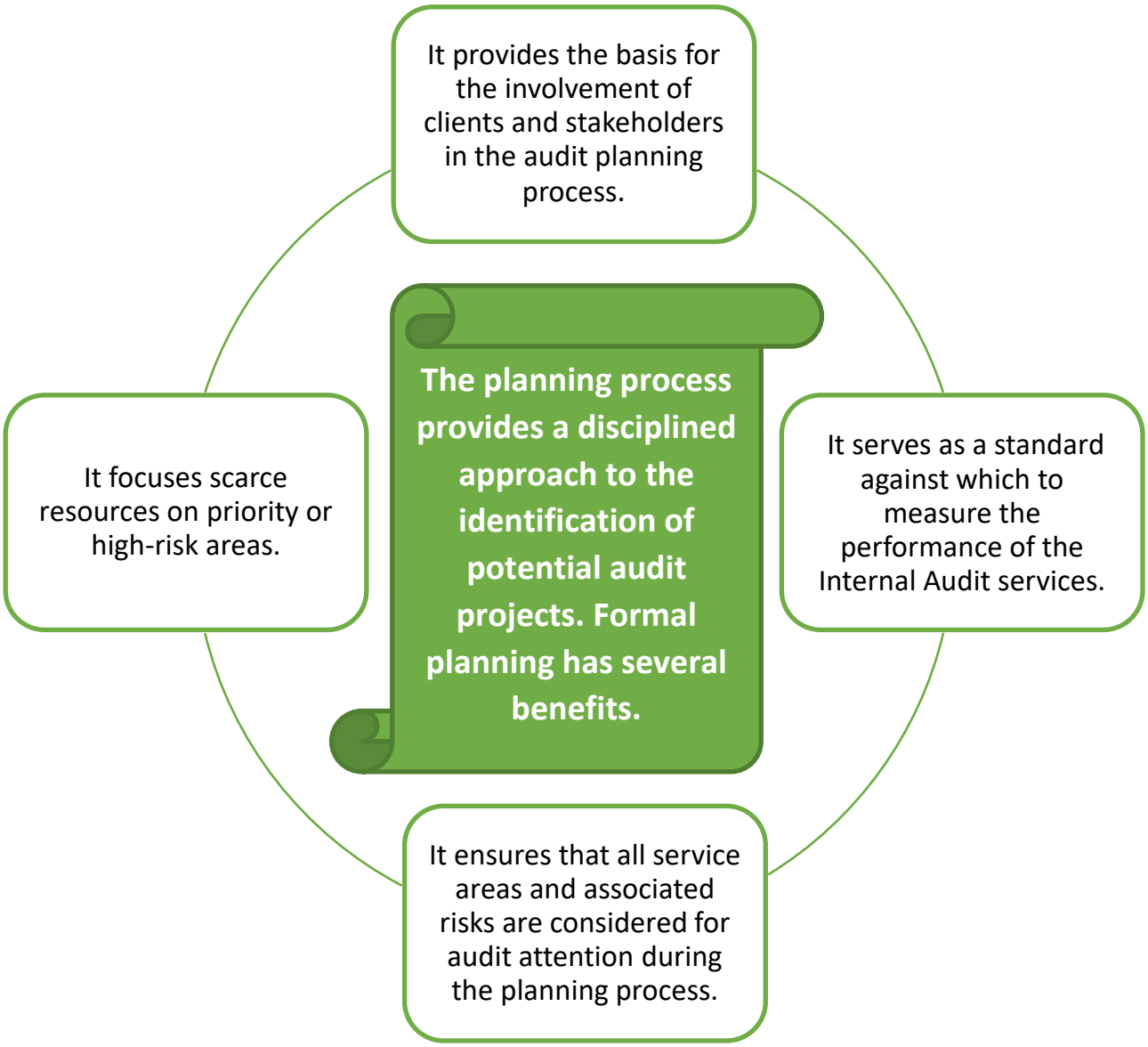




Performance Audits (also known as Value for Money/Operational): Evaluates operational processes to provide assurance that objectives are met and whether improvements can be made based on effectivness, efficiency and economy.	Financial Audits: Assesses accuracy, completeness, and timeliness of financial reporting	Compliance/Regulatory Audits: Ensures adherence to established regulatory requirements and policies

The three categories of audits

Our planning process



The plan is based upon the risks and priorities that exist at a certain point in time. Since we are operating in a dynamic environment, risks and priorities are constantly changing. Audits can be requested throughout the year which will be assessed and included as necessary on the audit plan.

When we believe it is in the best interests of the City, an adjustment will be made to the current audit plan. Changes to the plan and progress achieved on the plan will be reported to the Finance Committee each year.

The Audit Planning process is comprehensive and comprises several activities:

- identification and classification of auditable areas;
- evaluation of audit areas against standard criteria and risk factors;
- consultation with City Councillors and Senior Management and Staff;
- updating of Service Risk Profiles;
- consideration of resources available and required by project type;
- selection of audit projects;
- presentation of our proposed audit plan to Finance Committee for recommendation to Common Council; and
- communication of our final audit plan to Common Council for approval.

The current resources do not allow for the audit of all areas of the City on a cyclical basis. Nor is it desirable that this be the case.

Projects are selected as a result of the risk-based planning process; however, other factors need to be considered. Timing of a particular project may be a consideration, or the City may have recently been subject to an independent review by another party.

While not every area of the City will be subject to an audit during the year, we believe that all areas of the City should be considered during the risk assessment process. All projects will be re-evaluated annually to ensure continued relevance and priority.

Continue to change

Staying relevant is crucial to providing valuable information and recommendations to the City and it's stakeholders. Our goal is to consistently change. As we continue to build the Internal Audit services at the City you will start to recognize the audit plan and areas that stay constant, but you will continue to see something new in every plan going forward every year.


EMBRACE
THE
JOURNEY

COMMON COUNCIL REPORT

M&C No.	2022-133
Report Date	April 13, 2022
Meeting Date	April 19, 2022
Service Area	Growth and Community Services

His Worship Mayor Donna Noade-Reardon and Members of Common Council

SUBJECT: **Updates to Land for Public Purpose Policy**

AUTHORIZATION

Primary Author	Commissioner/Dept. Head	City Manager	Chair of Growth Committee
Emilie Murphy	***Jacqueline Hamilton***	***Kevin Fudge***	***Councilor Killen***

RECOMMENDATION

Growth Committee recommends that Common Council adopt the following policy statement:

"The City of Saint John's Land For Public Purposes Policy ensures alignment with provincial legislation and a process to utilize available funds through the provision of money-in-lieu-of-land through the development approval process to support recreation, park space and wellness in Saint John."

EXECUTIVE SUMMARY

The City of Saint John's Land For Public Purposes Policy provides a framework for utilizing available development land and/or money in lieu of land to support recreation, park space and wellness in Saint John.

Staff have made recommendations for updates to the land for Public Purpose (LPP) policy, most notably to the section of the policy that relates to the allocation of the money-in-lieu-of-land grant program.

The policy updates include clarifying definitions, adding in a reporting requirement, and ensuring the policy is in line with other municipal plans and grants. Noteworthy changes to the policy include an increase in maximum allowable funds for neighborhood and community impact projects, clarifying that LPP grants are eligible for non-city owned land, and adjusting the application time. The policy also confirms that for-profit organizations are ineligible for access to LPP funding.

The purpose of these proposed amendments is to reduce staff and public interpretation of the grant policy, and to strengthen support for community organizations.

PREVIOUS RESOLUTION

On April 12th, 2022, Growth Committee endorsed the following policy statement recommendation for Common Council's consideration:

"The City of Saint John's Land For Public Purposes Policy ensures alignment with provincial legislation and a process to utilize available funds through the provision of money-in-lieu-of-land through the development approval process to support recreation, park space and wellness in Saint John."

REPORT

The development of vacant land for the purposes of human habitation results in a further demand for land for recreational enjoyment of the neighborhood, community and the City. The Provincial Community Planning Act recognizes this need and requires that land which is part of a subdivision be set aside for public purposes, or that money in lieu of land is received by the municipality.

Growth Committee has endorsed some changes to the LPP policy, specifically to the allocation of the money in lieu of land grant program. Changes to the grant reflect a broader shift that is outlined in PlaySJ, which is to move from City-led recreation programming to City-supported programming. This new model has created an increasing need for community members to organize themselves and fundraise for recreational infrastructure related needs. The LPP grant fund is available to assist in these endeavors.

Key changes to the policy are:

- An increase in the funding allocations for local and community-based projects.

- Defining and clarifying the interpretation of the grant suitability for non-city owned land. Identifying a preference for land owned by the City, followed by provincial and federal land, and then by privately owned land respectively. This is a change from past staff interpretation that land must be City-owned. It should be noted that for-profit organizations will not be considered for LPP funding.

- Defining and clarifying the interpretation of 'barrier free' access to facilities to mean that the public has access to the facility at no cost for a reasonable portion of the time.

- A shift from bi-annual to annual applications, to align with other city grants and available staff capacity.

- Allows for a community group to partner more easily with the Parks Service, where staff would lead a project with community support.

By clarifying definitions and ensuring compatibility with other municipal and provincial bylaws, the intention of these policy changes is to clarify and decrease barriers for community groups. Staff will continue to work with community groups to ensure that projects are in keeping with current municipal plans and are suitable for the greater needs and desires of the citizens of Saint John. Furthermore, these policy changes will provide flexibility for Council and staff to partner with community groups to leverage LPP funds when a need for has been identified through public consultation or municipal planning.

In the event Council approves the recommendation, staff will proceed immediately with a 2022 call for proposals for groups interested in accessing LPP funding.

STRATEGIC ALIGNMENT

Updates to the LPP Policy will directly support the following Council Priorities 2021-2026: Grow, Belong, Green, Perform and Move.

SERVICE AND FINANCIAL OUTCOMES

There are no changes to current service levels, or financial implications, associated with these policy changes. There is currently $241,876.50 in the LPP reserve fund within the City of Saint John.

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

This report was supported by the City Manager's Office, General Counsel's Office, Public Works and Transportation, and the Growth and Community Services team.

ATTACHMENTS

Land for Public Purposes Policy, Updated 2022

SAINT JOHN

Title: Policies For The Acceptance Of Land For Public Purposes And Use of LPP Funds

Subject: **Land for Public Purpose**	Category: **Growth and Community Services**
Policy No.:	M&C Report No.:
Effective Date: **19 April, 2022**	Next Review Date:
Area(s) this policy applies to: **Cross Corporate**	Office Responsible for review of this Policy: **Growth and Community Services**
Related Instruments:	Policy Sponsors:
	Document Pages: **This document consists of 8 pages.**

Revision History:

Common Clerk's Annotation for Official Record

Date of Passage of Current Framework:_____

I certify that this Policy was adopted by Common Council as indicated above.

_____ _____

Common Clerk Date

Date Created:	Common Council Approval Date:	Contact:
23.03.2022		**Growth and Community Services**

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City of Saint John

Policies For the Acceptance of Land for Public Purposes and Use of LPP Funds

1. POLICY STATEMENT

The City of Saint John's Land For Public Purposes Policy ensures alignment with provincial legislation and a process to utilize available funds through the provision of money-in-lieu-of-land through the development approval process to support recreation, park space and wellness in Saint John.

2. INTRODUCTION

The development of vacant land for the purposes of human habitation results in a further demand for land for recreational enjoyment of the neighbourhood, community, and the city. The Community Planning Act recognizes this need and requires that land which is part of a subdivision be set aside for public purposes, or that money in lieu of land is received by the municipality.

3. DEFINITIONS

"Grant" refers to financial or in-kind assistance provided by the City to an eligible grantee. Discounts, reimbursements, relief on existing contracts, leases and user fees when service has already been provided are forms of financial assistance and is considered a city grant.

"In-Kind Grant**"** refers to a grant for the provision of municipal property/facilities, materials, or resources to an eligible grantee. Cash funds are not provided however it is recognized that such grants will involve either an expense or foregone revenue for the donor. In-kind grants are estimated at fair value.

"Barrier free" general public access refers to a property that does not charge for admission nor has fencing excluding access for a portion of its operating time.

"Act" refers to the Community Planning Act of New Brunswick.

"Land for public purposes" means land other than streets, for the recreational orother use or enjoyment of the general public, such as:

a. an access to a lake, river, stream, sea or other body of water,

b. a beach of scenic area along the shore of a lake, river, stream, sea or other body of water,

c. a conservation area,

d. land adjoining a school, for joint recreational purposes,

e. land for a community hall, public library, recreational use or other similar community facility,

f. open space, to provide air and light, to afford a view to or from a development or to a lake, river, stream, sea or other body of water, or for other purposes,

g. a park, green belt or buffer area dividing developments, parts of a highway or a development and a highway,

h. a pedestrian way to a school, shopping centre, recreational area or other facility,

i. a protection area for a water course, stream, marsh, water supply lake or other body of water,

j. a public park, playground or other recreational use,

k. a visual feature, or

l. a wooded area, slope area or a site giving view to a scenic area to provide diversity.

4. ENABLING LEGISLATION AND REGULATION OF LAND FOR PUBLIC PURPOSE

I. The *Community Planning Act* provides the City with the authority to enact a Subdivision By-law that includes the following options:

a. the requirement that the developer of a subdivision set aside Land For Public Purposes in an amount not exceeding 10% of the area of the subdivision; and

b. that at the discretion of council, instead of setting aside land, that the sums indicated in the Subdivision By-law, not exceeding 8% of the market value of the land in the subdivision at the time of submission for approval of the subdivision plan be paid to the local government.

II. The City enacted a Subdivision By-Law, C.P. 112, which requires that as a condition of approval of a Subdivision Plan:

a. land representing 10% of the area of the proposed subdivision, exclusive of the land to be vested as public streets, is to be dedicated to The City of Saint John at such location as assented to by Council as Land For Public Purposes; or

b. a sum of money representing 8% of the market value of the land of the proposed Subdivision, exclusive of land to be vested as public streets, is to be provided to The City of Saint John as accepted by Council as a money in-lieu dedication; or

c. a combination of Land For Public Purposes or money in-lieu be provided of up to 8% of the value of the land in the proposed subdivision, less the value of the Land For Public Purposes, being provided as money in-lieu.

III. The requirement for Land For Public Purposes or money in-lieu does not apply where the land has already been subdivided and Land For Public Purposes or money in-lieu (or a combination thereof) has already been provided on the same land, or the land is being subdivided for the sole purpose of:

a. correcting or rearranging lot boundaries;

b. being assembled with or added to adjoining land; or

c. being assembled for a future proposed subdivision.

5. ACCEPTANCE OF LAND FOR PUBLIC PURPOSE

The Subdivision By-law provides that the only time Land For Public Purposes shall be accepted if it is a Pedestrian Walkway and meets the specific conditions outlined at s. 16(2) of the Subdivision By-law.

I. Land For Public Purposes shall only be accepted if the specific provisions within the Subdivision By-Law are met.

II. Unless the specific provisions of s. 16(2) of the Subdivision By-law are met for the vesting of Land for Public Purposes to The City of Saint John, a sum of money representing 8% of the market value of the land of the proposed Subdivision, exclusive of land to be vested as public streets, is to be provided to The City of Saint John as a money in-lieu dedication.

6. MONEY IN-LIEW OF PUBLIC LAND

In accordance with s. 17(2) of the Subdivision By-law, the determination of market value of the land shall be made by The City of Saint John, but where a Developer does not accept such determination, at the cost of the Developer, an appraiser acceptable to both the Developer and The City of Saint John shall determine such value.

7. GUIDELINES FOR THE EVALUATION OF REQUESTS FOR MONEY FROM THE LPP FUND

In accordance with s. 76(2) of the Community Planning Act, all money received in-lieu of Land For Public Purposes shall be paid into a special account and the money in that account is to be expended by the council for acquiring or developing Land For Purpose Purposes and no other purpose.

I. Applications from Community Groups. For funds from the LPP Fund will be accepted annually on January 1st dependent on the availability of funds.

II. The maximum eligible funding from the LPP Fund for projects will be based on the following classification:
   a. Local Level: A grant of 50% of the cost to a maximum of $5,000.00 for projects that serve specific neighbourhoods or local interest groups.
   b. Community Level: A grant of 50% of the cost up to a maximum of $10,000.00 per year available for projects that serve larger community interests and activities.
   c. City-Wide Level: A grant of 50% of the cost to a maximum of $50,000.00 per year to support large projects that serve the entire city and surrounding area residences, as well as potential tourist attractions.

III. No more than $50,000.00 from the LPP Fund shall be paid for one site or project. Where additional funds are needed to facilitate development of LPP, it must be a project which serves a community wide interest and, in those circumstances, the maximum available amount shall be $75,000.00.

IV. From time-to-time specific projects are identified by City Staff, through public consultation, as a priority. In this instance, an applicant could partner with the City and the 50% fund matching threshold may be reduced.

V. Preference will be given to playgrounds developed at public schools and community centres.

VI. No monies from the LPP fund shall be considered if the applicant or project has already received funding though another municipal grant.

VII. Preference will be given to projects located on municipal land, followed by provincially or federally owned land, and finally on privately owned land.

VIII. If the Applicant seeks LPP Funds for a project that is not located on municipal, provincial, or federally owned land, the Applicant shall be responsible to present a plan for the long-term maintenance of public access, use, and enjoyment of the project. The City would have the right to insist on any contractual obligation to protect the long-term interests of the public that it sees fit and the funding will only be granted if that interest can be protected.

IX. Projects must provide barrier-free access to a portion of the facility.

X. Staff evaluating applications for LPP Fund retain discretion to ensure the following:

a. Projects are in alignment with any current municipal master plans.

b. Flexibility to address special community needs or new recreational service offerings.

c. LPP funds received from commercial developments should prioritize and consider applications which are geographically close when possible.

d. Location of past LPP approvals, and maximum use for the most residents. Staff would assess that there is interest/need for such new or expanded offerings in the community.

e. Common Council at its sole discretion may choose to provide LPP funding to a project, as it deems appropriate.

f. The Applicant has demonstrated that the remainder of the funding is current held in a bank account, approved as a grant, or that in-kind contributions have been confirmed prior to the City releasing any money from the LPP Fund

8. GENERAL TERMS AND CONDITIONS

I. No funding will be given to for-profit or private individuals. If a group is not an incorporated non-profit, they must partner with the city of Saint John or a non-profit organization to be eligible for funding.

II. All Projects must be completed within 1 year of the approval date.

III. Extensions may be approved upon request. Grants cannot be awarded Retroactively.

IV. A different phase of the same project will not necessarily be supported in any succeeding year. Grants are to be used only for the intended purpose.

V. Any recipient who uses the funds improperly, ceases operation, or knowingly provides false information must promptly repay the grant.

VI. No grant (or any part of it) may be transferred or assigned to another party without the prior written consent from the Land for Public Purpose grant review board.

VII. The recipient must keep and maintain all records, and upon completion of the project, fill out and submit a Land for Public Purpose Reporting Form.

VIII. The recipient will acknowledge the support of the City of Saint John in all publicity and programs relating to the project either by social media or signage, as appropriate.

IX. The City of Saint John is not liable for any damages, injury, and/or loss of revenue as a result of any grant awarded project being undertaken, and makes no commitments to maintain or provide services above and beyond current levels unless agreed upon by the Service Provider (City of Saint John Parks, Sanitation, etc.).

SAINT JOHN

COMMON COUNCIL REPORT

M&C No.	2022-132
Report Date	April 13, 2022
Meeting Date	April 19, 2022
Service Area	Growth and Community Services

Her Worship Mayor Donna Noade Reardon and Members of Common Council

SUBJECT: Municipal ENCORE Program: 2022 Sidewalk Cafe Rebate Initiative

AUTHORIZATION

Primary Author	Commissioner/Dept. Head	City Manager	Chair of Growth Committee
David Dobbelsteyn	***Jacqueline Hamilton***	***John Collin***	***Councillor Joanna Killen***

RECOMMENDATION

Growth Committee Recommends to Common Council:

That the Common Council enact and direct the City Manager to implement the 2022 Sidewalk Café Rebate Initiative.

Further Be It Resolved that the City direct up to $20,000 to rebate applicants who pay for sidewalk cafe permit fees, zoning confirmation fees and fees for parking spaces through this initiative from the growth reserve funds already allocated to the Municipal Economic and Community Recovery Program.

EXECUTIVE SUMMARY

Staff recommend that Council implement the 2022 Sidewalk Café Rebate Initiative which will effectively waive 100% of sidewalk café permit fees and fees for parking spaces where larger patios are constructed. This program was offered as a pilot program by the City in 2021, and due to the long-term impacts of the pandemic on our hospitality sector, staff recommend offering the program once again in 2022

The initiative is applicable to areas covered by the current sidewalk café program which includes sidewalks and parking spaces within the Uptown Business Improvement Area (BIA) and not applicable to cafés or patios on private property that are covered under separate licensing agreements.

This initiative is in alignment with other Cities in Atlantic Canada that have also waived patio permit fees again in 2022.

There is minimal administrative burden to staff to implement the program and the policy is designed to meet the requirements of our Sidewalk By-Law while allowing the City to effectively waive fees.

Staff will publicize this program to typical applicants for sidewalk café permits and will work with our Growth partners to spread awareness of this initiative to other potential applicants.

Staff recommend the use of the Municipal ENCORE program to offset the cost of this initiative as it is a temporary COVID recovery program.

PREVIOUS RESOLUTION

April 12, 2022 Growth Committee Recommends to Common Council:

That the Common Council enact and direct the City Manager to implement the 2022 Sidewalk Café Rebate Initiative.

Further Be It Resolved that the City direct up to $20,000 to rebate applicants who pay for sidewalk cafe permit fees, zoning confirmation fees and fees for parking spaces through this initiative from the growth reserve funds already allocated to the Municipal Economic and Community Recovery Program.

May 3rd, 2021 Common Council Adopted the following resolution:

Whereas Common Council has implemented a Municipal Economic and Community Recovery program in order to enable and accelerate local economic and community activity in response to the current public health pandemic,

Now Therefore Be It Resolved that the Common Council enact and direct the City Manager to implement the 2021 Sidewalk Café Rebate Initiative.

Further Be It Resolved that the City direct up to $20,000 to rebate sidewalk cafe permit fees and fees for parking spaces through this initiative from the growth reserve funds already allocated to the Municipal Economic and Community Recovery Program;

And Further Be It Resolved that any funds directed to this initiative that remain unused by Dec 31, 2021 be reallocated to the Municipal Economic and Community Recovery Program.

On April 28, 2021
Growth Committee adopted the recommendation for the 2021 Sidewalk Café Rebate Initiative

May 25, 2020

Council adopted the Municipal Economic and Community Recovery Program and allocated $546,267.20 to be used for this program.

For brevity, staff refer to this program as the **Municipal *ENCORE* Program**

STRATEGIC ALIGNMENT

GROW

"Work with partners to create opportunities to attract and grow businesses including development of the waterfront and industrial parks."

This initiative aligns with the Council approved ***Municipal Economic and Community Recovery [ENCORE] Program.***

SERVICE AND FINANCIAL OUTCOMES

Council approved up to $546,267.20 to be used for the ***Municipal ENCORE Program*** from Growth Reserve of which there remains approximately $411,267.20 available in the Municipal ENCORE Program fund for this and future recovery initiatives.

In 2021, 17 applicants participated in the program. For many, this was the first time they had a cafe, and staff heard from applicants that some of them made the decision to invest capital in building patios was because the permitting fees were waived.

The total cost to the City in 2021 was $16,400. It was funded through the ENCORE program and was within the estimated program budget. Staff recommend the City direct up to $20,000 in funding in 2022, to allow for a few additional applicants, and to also cover the fee for zoning confirmation letters related to sidewalk cafes.

The cost to the City to pay for parking spaces for on-street café's was $5,500 in 2021, and staff expect the cost to be approximately the same amount in 2022

Council Approved Municipal ENCORE Program Objectives

A. All investments must be evaluated through the Recovery Program Evaluation Criteria;
B. Align with the City's Economic and Community Recovery efforts;
C. Receive policy-level approval from Growth Committee and Common Council for distribution;
D. Support the City's efforts to enable employment, population, tourism, and tax base growth;

E. Support programming in the commercial and cultural districts most impacted by COVID-19;
F. Support recovery funding programming from today until 2021, while adhering to varying degrees of social distancing;
G. Attempt to leverage additional funding, partnership and innovative programming from the community, private sector, and federal/provincial through the municipal investment;
H. Focus on municipal programming, assets, facilities, and investments;
I. Focus on areas of municipal authority.

Council Approved Municipal ENCORE Program Criteria

1. Support increase volume of potential customers/clients in commercial district (hotels, restaurants, retail, non-profits, arts and culture organizations, etc.);
2. Support the largest quantity of impacted organizations/businesses and uphold fairness in program delivery;
3. Internal capacity to support and execute initiative;
4. Ability to easily pilot option to assess expandability or discontinuation;
5. Affordable to implement from a goods and services perspective;
6. Option must ensure the safety of users;
7. Relative feasibility of implementation (authority, public engagement, procurement, planning, staff time, approvals);
8. Initiative must be temporary and cannot result in recurring expenses for the City of Saint John.

INPUT FROM OTHER SERVICE AREAS AND STAKEHOLDERS

This report has been drafted in consultation with Growth and Community Services, Strategic Services, the City Manager's Office, the General Counsel's Office, and Saint John Parking.

Staff also consulted with Uptown Saint John on the parameters of the initiative. Staff also received several positive comments from restaurants who participated in 2021, who expressed gratitude for the program and a hope that it would be offered again in 2022

ATTACHMENTS

2022 Sidewalk Café Initiative

SAINT JOHN

Municipal Economic and Community Recovery [ENCORE] Program.

2022 Sidewalk Café Rebate Initiative

1) The City of Saint John implemented the *Municipal Economic and Community Recovery [ENCORE] Program* in May 2020 to support recovery from COVID-19 in Saint John.

2) In order to support Economic and Community Recovery in the City of Saint John as a result of Covid-19, Common Council wishes to implement a Sidewalk Café rebate initiative to support local businesses.

3) The words defined in section 2 of the Use of Sidewalks By-law, By-law Number LG-13, when used in this document, shall have the same meaning as the said By-law.

4) This rebate initiative is only applicable for sidewalk cafés that are eligible to receive a sidewalk café permit.

5) This initiative will be in effect for the year 2022 only.

6) The City of Saint John will rebate 100% of sidewalk café permit fees, including fees for zoning confirmation letters, paid to the City by an applicant.

7) This rebate will be applied at the time the applicant pays their security deposit for their sidewalk café permit, or it will be reimbursed directly to the applicant if they have paid fees in 2021 before the adoption of this initiative.

8) The City of Saint John will waive 100% of fees paid by an applicant for the use of one or more parking spaces for their sidewalk café.

9) Approval for the number of parking spaces an applicant requires for their permit is at the discretion of the commissioner.

10) The City of Saint John will cover the cost of rebates and any eligible parking spaces though the Municipal Economic and Community Recovery Fund.

IN CELEBRATION OF OUR 50TH ANNIVERSARY WE'RE BOWLING FOR GOLD DURING THIS YEAR'S "*GOLDEN BOWL*"!

50 YEARS 1972-2022 CELEBRATION

Bowl for 90 minutes, pick your time on

Thursday May 26th **– School teams, PALS partners, community and company teams at Fairview Lanes. 5pm - 9:30pm**

Saturday May 28th **– Any team can bowl at Fairview Lanes. 10am - 7pm**

or *Bowl your own way!* Find a creative way to bowl at home, outside, or in the office and let us know when and where you're bowling so we can cheer you on!

Big Brothers Big Sisters

BOWL For Kids' Sake

ALL OF THE FUNDS RAISED DIRECTLY SUPPORT BIG BROTHERS BIG SISTERS' MENTORING PROGRAMS IN YOUR COMMUNITY!

https://saintjohn.bigbrothersbigsisters.ca/event/bowl-kids-sake/

97.3 the WAVE · 98.1 charlotte FM · IRVING J.D. IRVING, LIMITED · PALS Partners Assisting Local Schools · SUBWAY · CHSJ Country 94.1 · STEWART McKELVEY LAWYERS • AVOCATS · AIR CANADA FOUNDATION · MANDEVILLE PRIVATE CLIENT INC. MAKING CLIENTS WEALTHY OUR MISSION



BOWL FOR KIDS' SAKE 2022 – TEAM REGISTRATION FORM

Please complete, return by fax/email *or* register your team online to confirm your team entry, bowling location, day and time!

Fax: 633-7781 / Email: laurie.collins@bigbrothersbigsisters.ca / Phone: 635-1145

Your team name: _____

(Please Print)

Company/Organization Name: _____

Please issue a challenge on our behalf to: _____

	Name	Email
Team Captain *Phone #:*_____		
Team Member 2		
Team Member 3		
Team Member 4		
Team Member 5		
Team Member 6		

PLEASE INDICATE DESIRED BOWLING TIME BELOW (SHIFTS ARE 90 MINS)

THURSDAY, MAY 26	SATURDAY, MAY 28	WE ARE PLANNING OUR OWN BOWLING TIME
Fairview Lanes	**Fairview Lanes**	**Location** _____
5:00-6:30 _____	10:00-11:30 _____	**Date** _____
6:30-8:00 _____	11:30-1:00 _____	**Time** _____
8:00-9:30 _____	1:00-2:30 _____	
	2:30-4:00 _____	**What do you require from BBBS?**
	4:00-5:30 _____	_____
	5:30-7:00 _____	_____

Use the Online Fundraising Tool to help your team raise funds!

https://saintjohn.bigbrothersbigsisters.ca/event/bowl-kids-sake/

Big Brothers
Big Sisters

Bowl for Kids' Sake
Travel/Adventure Raffle 2022



PRIZES

1st Place - 2 Economy Class return tickets for air travel to any Air Canada scheduled destination in North America including Hawaii, Mexico and the Caribbean. Value $2,500. Tickets valid until June 30, 2023 and are subject to certain conditions including travel restriction periods.

AIR CANADA FOUNDATION

2nd Place – Celebrate Atlantic Package includes a variety of gift certificates that will make you happy during your staycation time on the East Coast.

QUODDY LINK MARINE

STUART HOUSE

3rd Place – Support Local Adventure Package includes a number of gift cards to make you feel good about supporting our local community.

TIMBERTOP

MOOSEHEAD – BREWERIES –

Tickets – 1 for $5.00, 3 for $10.00

Draw date – June 30, 2022

License # 0439893 56 004

https://saintjohn.bigbrothersbigsisters.ca/travel-adventure-raffle-2022/

About this event

The Red Triangle Award recognizes long and meritorious service, outstanding contributions and achievement in the community, while the Leader to Watch Award honours an individual who is a role model for other young adults in our community.

This year's Red Triangle Award recipient is **Juanita Black** and taking home the Leader to Watch Award is **Nicole Vair**.

Juanita Black, the founding editor of Around the Block, is well known for her voice as a poverty advocate, working together with others to bring about change at the local, provincial and national levels. Her experience as a young single mother living in poverty has been a big inspiration to give back. She has dedicated her life to being a volunteer leader in her neighbourhood, a mentor in her community and a champion at the provincial and federal level to promote fairness and justice and a better quality of life for all. She illustrates the power of the voice of lived experience and the power of one working with others to bring about change!

Juanita's powerful message in building a more caring community is captured in a new documentary film, Perseverance: The Juanita Black Story which charts more than 30 years she's spent as a volunteer, poverty advocate, mentor, philanthropist and neighbourhood leader.

The Leader to Watch Award recipient demonstrates leadership and enthusiasm in their life, in learning and in volunteering in our community. **Nicole Vair** has demonstrated her leadership skills through her work experiences and volunteer activities. Anyone that has had the opportunity to be in Nicole's inner circle feels welcome, accepted, and appreciated. She is a role model that leads by example. Nicole has served on the International Committee, recruiting volunteers and organizing Peace Week activities. She was instrumental in the creation of the YMCA Youth Council in 2017 and is still on the committee, providing support for initiatives and encouraging youth to be involved with the Y and their community.

Nicole is an active volunteer in the community and has partnered with groups such as Project Roar, Operation Red Nose, The East magazine, Inter Action School of the Performing Arts and the Saint John Theatre Company. She currently serves as the Co-Chair of Fusion Saint John and recently joined the YMCA Strategic Planning Task Force this year, helping to identify the priorities that will shape the future of the Y.

About the Event

Join us Thursday, May 26, 2022 for a live in-person gala at the Irving Oil Field House. The event will include passed hot and cold hors d'oeuvre by Grannan's and a cash bar. All ticket holders will be entered into a draw the evening of the event for a chance to win 2

Air Canada tickets anywhere Air Canada flies in North America including the Caribbean and Hawaii.

You will also receive a tax receipt for $100 per ticket which goes to supporting our Strong Communities Campaign.

Tickets are $125 and on sale now.
(You will receive a $100 tax-deductible receipt for your ticket purchase.)

For more information contact: Lori Logue - l.logue@saintjohny.ca

Date and time

Thu, 26 May 2022, 6:00 PM ADT

Location

Irving Oil Field House
129 McAllister Drive
Saint John, NB E2J 2S7


1:14
Photo
IRVING
J.D. IRVING, LIMITED
FCC
Construction
Presented by
Red Triangle Awards
Emera
New Brunswick
$125 Per Person
May 26, 2022 | 6:00pm | Irving Oil Field House
Proceeds in support of the Strong Communities Campaign
2 likes
ymcaofgreatersaintjohn The Red Triangle Awards, presented by @Emera, recognizes long and meritorious service, outstanding contributions and achievement in the community, while the Leader to Watch Award honours an individual who is a role model for other young adults in our community.
Thank you to our Gold Sponsor, @JDI & @FCC Construction.
Purchase your tickets today! http://ow.ly/vpaf50IC0sm
The Red Triangle Award Event is the premier fundraising event for the YMCA of Greater Saint John, funds raised support the Strong Communities Campaign and ensures that all community members have the opportunity to participate in Y programs, regardless of financial circumstances.
4 hours ago
Add a comment as waynelongmp...

Good morning your Worship and fellow Councilors',

Living in Saint John for the past 39 years, it was hard to not know Judith. Not necessarily by name at first, but that she was involved in a lot of activities in the city.

It wasn't until 2014 when I moved across the street from her and Ralph that I really began to know them. And in the most recent half of those years, had began to take them under my umbrella to do simple things that would assist them as I have a great respect for the elderly, being raised by my Grandmother.

I do not know the process of getting things moved in this city, but I do know all of you and have seen all of you get in front of things that are right for the city.

What I'm proposing is that the section of the sidewalk between the new Wentworth and to the end of 233 Princess Street be taken over by the city for planting of the flowers annually and perhaps a plaque telling of the very brightly dressed, outspoken for all lady that she was.

yours in hospitality,

Kevin Carpenter
(506) 607-1716
230 Princess Street
Saint John, NB
E2L 1L1

Common Council:

In recognition of the monumental 30th anniversary--the Falun Dafa Day celebration, May 13th, 2022, we respectfully request a recognition in the form of a greeting video/greeting letter.This is our annual celebration of the contributions of members of the Falun Dafa community in Canada—many of whom arrived here as refugees fleeing the persecution in China—and to celebrate the values of Truthfulness, Compassion, and Forbearance.

Originated from a tightly controlled communist Country, China, 30 years ago, along with 23 years' unimaginable persecution even with the horrific organ harvesting, Falun Dafa communities have endured, preserved and flourished peacefully. At the same time, Canadian Falun Gong practitioners are proud to build our communities here and call Canada our home.

Since October 2020, thousands Canadians have participated in the free online Learning Falun Gong seminars, hosted every week in English and French by volunteers. Moreover, under the lock-down in 2021, We also delightedly had flags-raisings or lighting-ups arranged in 8 cities.

Here in Canada, we are truly grateful that we are able to enjoy the freedom, diversity and compassionate support across the Canadian society. Every year we have garnered worldwide recognition, including thousands of greetings and proclamations from governments, officials, and our friends. In 2021 alone, we were very encouraged to receive over 130 supports from our MPs, MPPs, Mayors, and City Councillors.

By sending a greeting to mark the special 30th Falun Dafa Day, you help affirm Canada's commitment to the values of Truthfulness, Compassion, and Forbearance, and inclusiveness, human rights, and freedom of conscience.
For the greeting messages, we would truly appreciate if you could please send it to us by May 5th, 2022. Should you have questions, please don't hesitate to contact us.

Sincerely,
Pixing Zhang on behalf of Falun Dafa Association of Canada
Tel: 4168358337 Email: pixingzhang@gmail.com

8 Flag Raising and Light-up Ceremony Hosting Cities in 2021:
Niagara Falls, ON; Edmonton, AB; Kingston, ON; New Westminster, BC; Nanaimo, BC; Orangeville, ON; St. Catharine, ON; Orillia, ON

Mayors issued greeting/proclamation(Partial)
Mayor Brian Bowman, Winnipeg, MB
Mayor Charlie Clark, Saskatoon, SK
Mayor Michael Fougere, Regina, SK
Mayor Mike Savage, Halifax, NS
Mayor John Tory, Toronto, ON
Mayor Jim Watson, Ottawa, ON
Mayor Bryan Paterson, Kingston, ON
Mayor Marianne Meed Ward, Burlington, ON
Mayor Maurizio Bevilacqua, Vaughan, ON
Mayor Ed Holder, London, ON

Mayor Lisa Helps, Victoria, BC
Mayor Colin Basran, City of Kelowna, BC
Mayor Brad West, City of Port Coquitlam, BC
Mayor Jack Froese, Township of Langley, BC
Mayor Ray Ralph, Town of Devon, AB
Mayor Darren Ellis, George's Brook-Milton, NL
Mayor Daniel Conway, St. George's, NL

Greetings for Falun Dafa Month Celebration 2021(excerpt from 138 greetings issued by representatives of three levels of government):

"My thanks to members of the Falun Dafa community in Saskatchewan for contributing to a more harmonious society. As well, thank you for sharing your meditation practices to help others manage the additional stress caused by the challenges of the past year." -Lieutenant Governor Russ Mirasty of the Province of Saskatchewan, Letter of Greetings, 2021 Falun Dafa Day

"On behalf of Her Majesty Queen Elizabeth II, I commend you for your promoting peace in the world, especially through your teachings on the universal human values of truthfulness, compassion and forbearance."
-Lieutenant Governor of Province of Prince Edward Island, Letter of Greetings, 2021 Falun Dafa Day

"Through the promotion of the universal principles of truthfulness, compassion, and tolerance, this traditional Chinese practice has attracted followers around the world and I am proud of Canada's lively Falun Dafa community. In Canada, we are fortunate to live in a country that respects human rights and Canada's Conservatives will always stand up for religious minorities." –Hon. Erin O'Toole, Leader of the Conservative Party, greetings 2021

"Your compassion, your truthfulness, your principles, and your morals are wonderful attributes to all of you. We should continue to focus on issues of freedom, respect, and love for each other as we continue to build a better Canada and a better world." - MP Judy Sgro, co-chair of the Falun Gong Parliamentary Friendship Group, Video Greeting 2021

"But we also know today that Falun Gong, long a legal entity in Hong Kong, is resisting the regime's intimidation, an important voice in defense of the democratic principles of free thought, free speech, free assembly, and the rule of law… on this anniversary, it is an honor to join millions enjoying freedom around the world and offering our support of greetings: Zhen, Shan, Ren [Truthfulness-Compassion-Forbearance]."
- MP Peter Kent, Video Greeting 2021

"Your commitment to Compassion, Truthfulness, and Forbearance in the midst of very challenging circumstances has been an inspiration to me and to many others…. the Falun Gong community has been leading the way in terms of advocating for their own community but also highlighting the plight of the other communities facing challenges as well."
- MP Garnett Genuis, co-chair of the Inter-Parliamentary Alliance on China, Video Greeting 2021

"I have great respect for the Principles of Truth, Benevolence and Forbearance, which the guide the Falun Dafa movement. I stand with you not only in celebration but in solidarity as you fight to protect your right to your spiritual practice." -Elizabeth May, Member of Parliament (MP) and Parliamentary

Leader of the Green Party of Canada, Greeting Letter 2021 Falun Dafa Day

“The past year has been a time of uncertainty and struggle for many. However, I know that Falun Dafa’s values of truthfulness, harmony, compassion and tolerance have guided and enriched the lives of many thousands of practitioners these difficult times.”
- MP Hon. Candice Bergen, Letter of Greetings, 2021 Falun Dafa Day

“Falun Dafa is an ancient practice that transcends barriers and embraces people from all walks of life – guided by principles of “Truthfulness, Compassion, and Forbearance”. Sadly, innocent practitioners of this peaceful discipline continue to be persecuted on ethnic or religious grounds by the Chinese Communist Party. We must continue to stand in solidarity with adherents of Falun Dafa and all other oppressed religious minority groups, such as Tibetans and Uighurs.”
- Senator Thanh Hai Ngo, Greeting Letter, 2021 Falun Dafa Day

Greeting from MPs: Hon. Candice Bergen, James Bezan, Peter Kent, Mark Gerretsen, Ziad Aboultaif, James Cumming,Tom Kmiec,Kerry Diotte, Dominic Cardy,Elizabeth May, Ed Fast, Laurel Collins,Marc Dalton, Brad Vis, Tamara Jansen,Stephanie Kusie, Greg McClean,Jag Sahota,Len Webber,Ron Liepert,Kelly McCauley,Heather McPherson,John Barlow,Ted Falk, Kyle Seeback,Cathay Wagantall,Warren Steinley,Marty Morantz,Pierre Poilievre,Marie-France Lalonde,Scott Reid

Greeting from MPPs:Belinda Karahalios,Lindsey Park,Hon. Peter Bethlenfalvy,France Gélinas,Amy Fee,Hon. Laura Ross,Marty Morantz,Dijieet Brar,Stephen Blais et.al

M&C No.	2022-134
Report Date	April 13, 2022
Meeting Date	April 19, 2022
Service Area	Corporate Services

SUBJECT: Amended Letter of Engagement - PwC

EXECUTIVE SUMMARY OF COMMITTEE OF THE WHOLE REPORT FOR OPEN SESSION OF COUNCIL

The City of Saint John seeks to retain the services of PwC to help draft a Request for Qualifications and a Request for Proposals in relation to procurement of services relating to the City of Saint John Sustainability Plan.

COUNCIL RESOLUTION

That the Mayor and Clerk be authorized to execute the Amended Engagement Letter with PwC in the form as presented to Committee of the Whole at its April 19, 2022 meeting, for the drafting of a Request for Qualifications, a Request for Proposals and for expert advice in the procurement process in relation to the City's review of its Agencies, Boards and Commissions.

M&C No.	2022-131
Report Date	April 13, 2022
Meeting Date	April 19, 2022
Service Area	Growth and Community Development Services

SUBJECT: Assignment of Lease re Sagrati's - City Market

EXECUTIVE SUMMARY OF COMMITTEE OF THE WHOLE REPORT FOR OPEN SESSION OF COUNCIL

The City renewed a lease with Black Douglas Holding Ltd. for the stall space occupied by Sagrati's on April 4th, 2022. Sagrati's is a long-standing and valued tenant at the market. They have an active following of dedicated customers who love their baguettes, wraps, other assorted goods, and they are well known for their bustling catering business.

Black Douglas Holding Ltd. has now sold Sagrati's, and after conducting proper due diligence, the City has provided consent to assign the lease to the new owner, Kyle Stewart, who has committed to continue operating Sagrati's in the same spirit as the previous owner. The City also extends its best wishes to Kylee Douglas of Black Douglas Holdings Ltd. in her future affairs.

COUNCIL RESOLUTION

NOW THEREFORE BE IT RESOLVED that Common Council waive the required notice period under clause 12.02 b) of the Lease and consent to the assignment of said Lease for Stall 15 and ancillary space at the City Market with Black Douglas Holdings Ltd. to Kyle Stewart dba Sagrati's; and that the Mayor and City Clerk be authorized to execute the consent to assignment of Lease and the Landlord's Undertaking in the form attached to M&C No. 2022-131 and any documents ancillary thereto.