

City of Fredericton

**Five-Year Capital Investment Plan
for the GTF Administrative
Agreement**

2019 – 2023

Department of Environment and Local Government

INTRODUCTION

The *City of Fredericton* has prepared a five-year Capital Investment Plan for the years 2019 – 2023 respecting the Gas Tax Fund (GTF) administrative agreement. Included are descriptions, cost estimates and financing for each selected project. Each project will contribute towards achieving the following program benefits:

- a) Beneficial impacts on communities of completed eligible projects;
- b) Enhanced impact of GTF as a predictable source of funding including incrementality; and,
- c) Progress made on improving Local Government planning and asset management.

CAPITAL INVESTMENT PLAN CONTENT

The capital investment plan for the GTF administrative agreement includes the following:

1. Certified copy of the resolution from Council adopting the five-year Capital Investment Plan for the GTF Agreement of the municipality
2. Project name, category, description, expected outcomes, proposed indicators for each tangible capital asset project. Also indicate if an Environmental Impact Assessment (EIA) and a tender are required for each project.
3. Five-Year Capital Budget Summary (Excel spreadsheet)

City of Fredericton
FIVE-YEAR CAPITAL INVESTMENT PLAN
FOR THE GTF ADMINISTRATIVE AGREEMENT

2019- 2023

RESOLUTION

Moved by Councillor _____ and seconded by Councillor _____ “that the document entitled *Fredericton Five-Year Capital Investment Plan for the GTF Administrative Agreement 2019-2023* be adopted”.

Motion Carried

I certify that the above resolution of the council of The City of Fredericton was adopted while in regular session December 13, 2021.

(SEAL)

Jennifer Lawson
CITY CLERK
CITY OF FREDERICTON

PROJECTS

1) Water and Sanitary Renewal

Project Category (*select one*):

Drinking Water	<input checked="" type="checkbox"/>	Recreational Infrastructure	<input type="checkbox"/>
Wastewater	<input checked="" type="checkbox"/>	Cultural Infrastructure	<input type="checkbox"/>
Local roads and bridges	<input type="checkbox"/>	Tourism Infrastructure	<input type="checkbox"/>
Community energy systems	<input type="checkbox"/>	Solid waste	<input type="checkbox"/>
Capacity building	<input type="checkbox"/>	Brownfield Redevelopment	<input type="checkbox"/>
Disaster mitigation	<input type="checkbox"/>	Public transit	<input type="checkbox"/>
Sport Infrastructure	<input type="checkbox"/>	Regional and local airports	<input type="checkbox"/>

Project Description:

The City of Fredericton continues to aggressively approach replacement of its underground water and sewer infrastructure. Replacement of aging piping in areas with high rates of water main failure is a key feature of an effective renewal program. The City also takes into consideration the growth of certain areas of the City and what demands are being placed on existing infrastructure.

The mains being considered for replacement were installed over an approximate 100 year period. There are a variety of pipe sizes, types and project lengths. Although there are specific areas of the City that consistently experience a higher rate of failure, the proposed gas tax projects will be located across the City of Fredericton.

EIA Required Tender Required

Expected Outcome:

Upgrading water & sewer mains with ductile iron will reduce the frequency of water main breaks, improve water quality and increase fire protection. Water quality risks associated with water breaks will also be reduced. Improvements in the distribution system reduce the amount of energy required to move water from one point within the distribution system to another. Improving the sewer collection system to reduce inflow and infiltration (I&I) issues also reduces the amount of electricity utilized to operate the lift pumps. This results in a reduction in greenhouse gas emissions from power generation and reduces cost of treatment.

Proposed indicator(s):

The City will report annually on projects including cost of project, length, diameter and type of pipe installed. Where appropriate, the number of water main breaks prior to construction will be tallied and compared over time to the incidence of breaks in the new system. Additionally any evidence of tuberculation will be collected and the improvement in flow will be calculated using Hazen-Williams C Factor Improvement calculations. Reduction in inflow & infiltration will be calculated.

Year	GTF Contribution	Total Cost
2019	\$3,051,976	\$3,051,976
2020	\$4,080,440	\$4,080,440
2021	\$5,160,717	\$5,160,717
2022	\$5,289,431	\$5,289,431
2023	\$11,503,843	\$11,503,843

2) Climate Change Adaptation and Disaster Mitigation

Project Category (*select one*):

- | | | | |
|--------------------------|-------------------------------------|-----------------------------|--------------------------|
| Drinking Water | <input type="checkbox"/> | Recreational Infrastructure | <input type="checkbox"/> |
| Wastewater | <input type="checkbox"/> | Cultural Infrastructure | <input type="checkbox"/> |
| Local roads and bridges | <input type="checkbox"/> | Tourism Infrastructure | <input type="checkbox"/> |
| Community energy systems | <input type="checkbox"/> | Solid waste | <input type="checkbox"/> |
| Capacity building | <input type="checkbox"/> | Brownfield Redevelopment | <input type="checkbox"/> |
| Disaster mitigation | <input checked="" type="checkbox"/> | Public transit | <input type="checkbox"/> |
| Sport Infrastructure | <input type="checkbox"/> | Regional and local airports | <input type="checkbox"/> |

Project Description:

Recent, prolonged flooding in the City of Fredericton has shown a need for more aggressive funding in infrastructure to address climate change and ultimately disaster mitigation for flooding. 2019 funding would be used primarily for valving of storm sewers to prevent water travelling through storm sewers and flooding low lying areas. Future funding could include but not be limited to raising streets, berming areas to prevent flooding of roadways and neighbourhoods, and preventing flooding for critical municipal infrastructure (Major Lift Stations, Police Station with critical IT infrastructure, City Hall, etc.). A detailed plan for future years will be completed once public consultation has been completed in July/August 2019

EIA Required Tender Required

Expected Outcome:

The intention of the disaster mitigation projects would be to reduce the impact from flooding in 4 major infrastructure components of the City:

- Key transportation infrastructure
- Critical municipal infrastructure
- Local watershed resilience
- Flood risk mitigation strategies for properties

Proposed indicator(s):

Proposed indicators can be as follows:

- Main roads kept open as a result of mitigation projects
- Enabling businesses and institutions in low lying areas remain open
- Ensuring that the Water and Sanitary systems continue to operate properly
- Reduce the impacts on municipal services, infrastructure and neighborhoods by managing storm sewer systems.

Year	GTF Contribution	Total Cost
2019	\$69,177	\$69,177
2020	\$66,825	\$66,825
2021	\$0	\$0
2022	\$0	\$0
2023	\$0	\$0

Five-Year Capital Budget Summary

Please refer to the Excel document named: “**Five-Year Capital Budget Summary 2019-2023.xls**”.