Fredericton

WATER AND SEWER LONG TERM FINANCIAL PLAN

SUSTAINABLE

EQUITABLE

QUALITY

RELIABLE

SAFE

SECURE

PROTECTING OUR INVESTMENT FOR THE NEXT GENERATION

Table of Contents

Introduction

The City of Fredericton provides safe, reliable, quality water and environmentally sound wastewater treatment for its residents and businesses. Through financially sound practices, the City is working to protect the investment in infrastructure today to achieve sustainability for future generations.

The Water and Sewer Long Term Financial Plan ("the Plan") as contained in this document is a continuation of the City's General Fund Long Term Financial Plan approved by Council in 2010. This document outlines the current situation, future opportunities, risks and recommendations as they relate to the City's water and sewer systems. A target for this plan is to maintain sustainable systems while keeping rates affordable through achieving efficiencies in operations and looking at other funding available for continued infrastructure renewal.

Background Information

The Water and Sewer Division has two main functions: to provide safe, reliable, quality water as well as remove and treat wastewater (sewer) for City of Fredericton customers. Sub-services for water provision include maintaining a secure source of water, treatment and purification of supply, transportation, storage and distribution, as well as maintenance of the water system including pipes and facilities. Sub-services for wastewater removal include collection, treatment and maintenance of both pipes and facilities. There is also the billing and payment collecting function related to both services.

The City of Fredericton has a well managed and safe water supply. However, this comes with a cost and there is a need to continually monitor and plan in order to continue to provide safe and sustainable potable drinking water to the residents of the City. In addition to safe water, the City treats wastewater generated by users of the system in an environmentally conscious manner. This is important for the continued availability of clean water and a sustainable environment.

The City is cognizant of the need to supply safe drinking water and to treat wastewater while maintaining fees and rates at an affordable level for residents, now and in the future. The water and sewer services are 95.7% funded through the sale of these services to users; the remaining 4.3% is funded from fire hydrant provision and other connection and service charges.

As a result of the City's transition to Public Sector Accounting Board Standards in 2009, the City has a complete listing of all City owned infrastructure and now has a clear understanding of the state of the infrastructure and the infrastructure deficit. The City's total infrastructure deficit was $183 million at December 31, 2012 with $130 million relating to the water and sewer infrastructure.

Main Principles of the Water and Sewer Long Term Financial Plan

The Plan is structured upon these key principles:

- Continue to provide high quality, safe drinking water and environmentally sound wastewater treatment for customers

- Encourage customers to conserve water and to be aware of the environmental impact of water consumption and wastewater treatment
- Sustainable and stable funding for infrastructure reinvestment to address current and future service requirements, the infrastructure deficit and growth
- Equity for all users with no one group subsidizing another group
- Funding solely by user rates or leveraging other levels of government funding with no debt financing
- Rates to remain competitive with surrounding communities
- Avoidance of rate shock with no drastic increases to user rates in any given year
- Achieve efficiencies through Lean Six Sigma methodology to contain operational costs
- As operating efficiencies are achieved, funding is reallocated to address the infrastructure deficit
- Align fixed and variable expenditures with the revenue rate structure
- Commit predictable, stable Federal Gas Tax Funding to the water and sewer infrastructure deficit to keep user rates affordable

Infrastructure Reinvestment

A joint study with the Canadian Construction Association, the Canadian Public Works Association, the Canadian Society for Civil Engineering and the Federation of Canadian Municipalities was completed. With input from many other Canadian organizations and municipalities, the group issued a Canadian Infrastructure Report Card in September 2012 that stated:

> *"Infrastructure is the foundation of our society and our economy. The hidden costs of deteriorating, outdated and under-performing infrastructure – to human welfare, property, and economic activity – are too great to be ignored. Whether acknowledged or not, these costs will continue to grow as infrastructure ages and deteriorates."*[1]

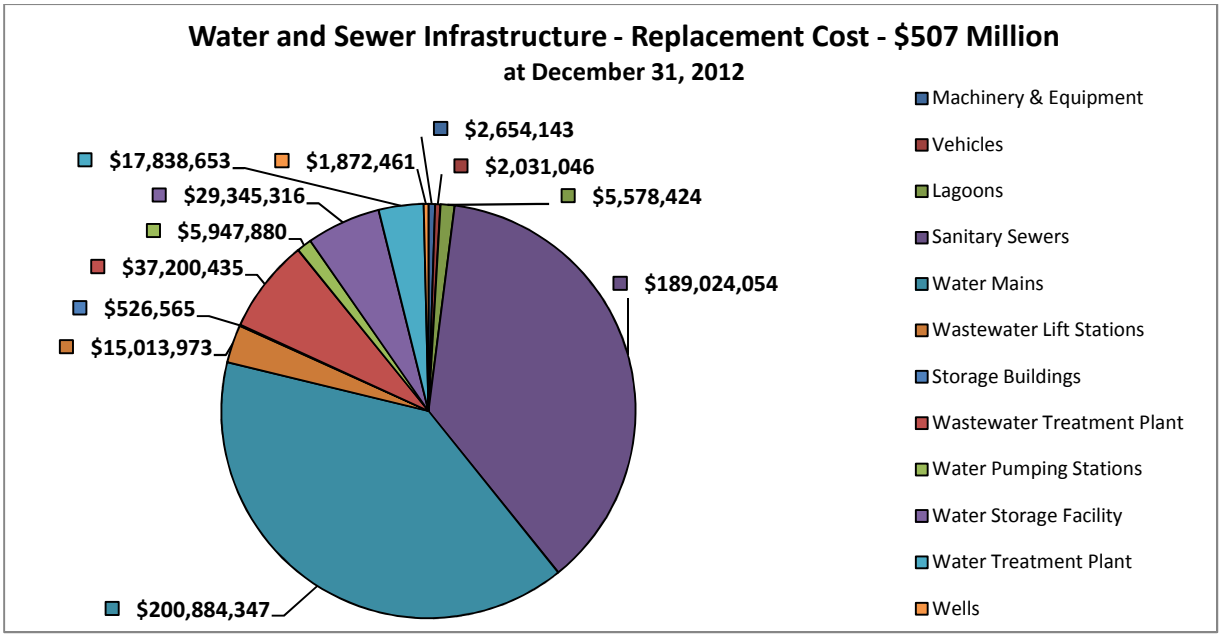
Based on this study, it was estimated that replacement costs related to water and wastewater infrastructure that were in "fair" to "very poor" condition across Canada was $25.9 billion for water and $30.9 billion for wastewater infrastructure.

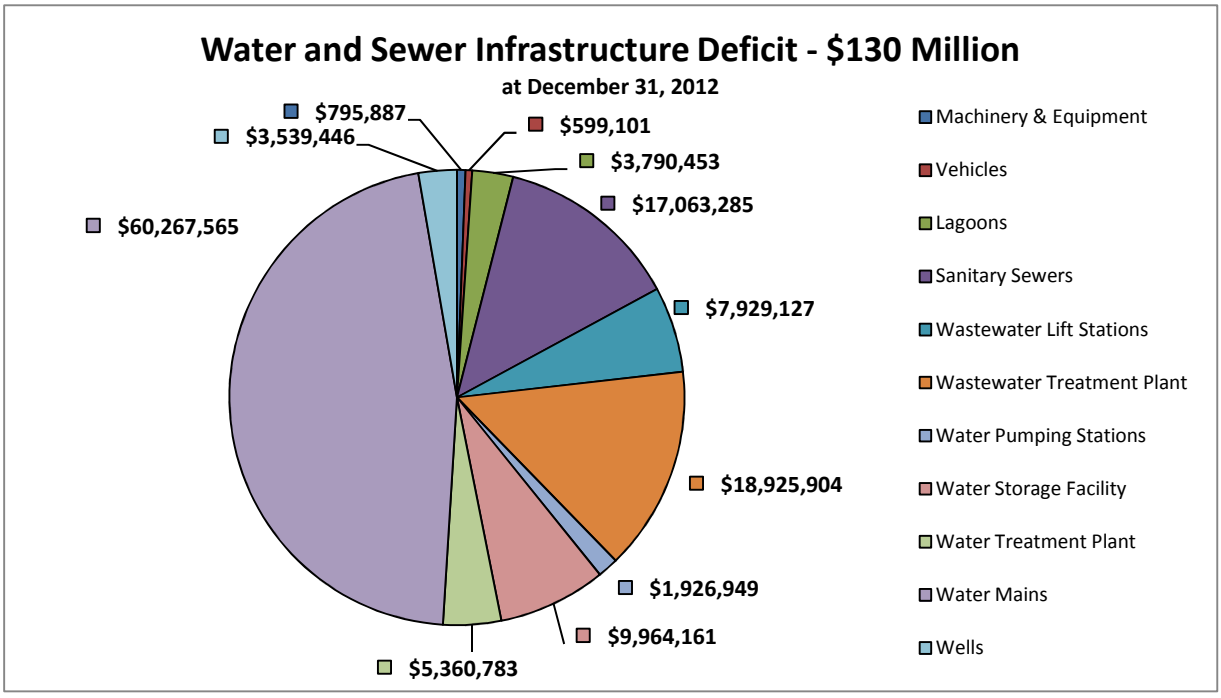
> *"The report card emphasizes the importance of having an asset-management system in place, in order to establish practices that will increase the longevity of the assets and optimize investments in maintenance and rehabilitation"*[1]

The water and sewer infrastructure deficit for the City of Fredericton sits at $130 million at December 31, 2012. With a replacement value of infrastructure at $507 million, this means that over 25% of the City's water and sewer infrastructure is past its recommended useful life. This is not sustainable as the City is spending operating dollars on breaks and fixes that could otherwise be allocated to replacing old infrastructure.

[1] Canadian Infrastructure Report Card, Volume 1: 2012 – Municipal Roads and Water Systems; www.canadianinfrastructure.ca

A long term infrastructure reinvestment strategy is needed. This Plan addresses this issue and provides the strategy needed to ensure that the investment in the systems is maintained for future generations.





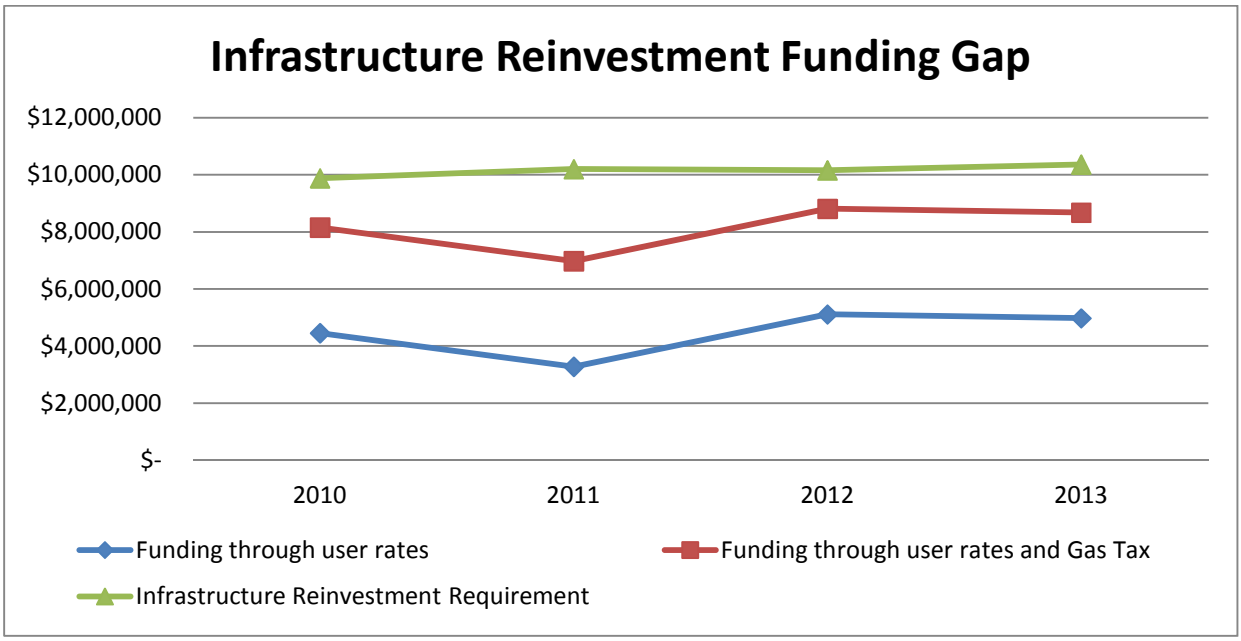
Essentially the infrastructure deficit means the City is relying on infrastructure that has met or exceeded its useful life based on industry standards. While this by no means indicates that the system is unsafe today, it can and has resulted in breaks in the underground infrastructure and other failures. This increases the cost to operate and maintain the infrastructure as the City must make repairs that would

not otherwise be required with renewed infrastructure. See *Appendix I* for a breakdown of Water and Sewer infrastructure by age.

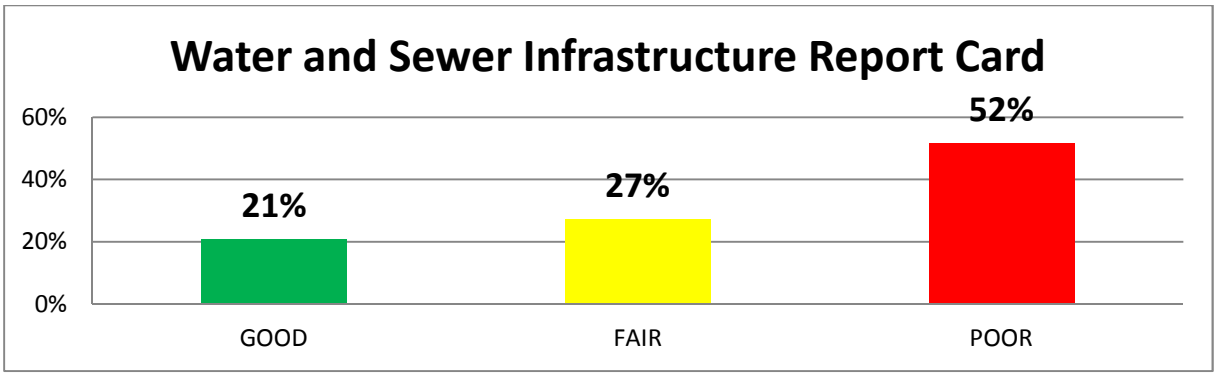
While the system is safe, every time there is a break in a line, it increases the risk of contamination. There are also other problems that arise due to breaks that include, but are not limited to, the reduction or loss of water or sewer services, traffic disruptions for unplanned underground infrastructure repair, loss to businesses if their operations are affected and loss of treated water.

After the 1973 amalgamation, the City focused on expansion of the system to the amalgamated areas of the City. In the late 2000's, the focus has shifted to renewing infrastructure in problem areas, yet there is such a backlog of aging infrastructure that it is not possible to catch up with the current level of funding.

Due to the long term nature of water and sewer infrastructure, there should be an investment of 2% of the total replacement value of infrastructure per year according to industry standards. This equates to spending $10 million annually with increases each year to keep up with inflation. Currently, the City is not meeting this target; however the benefit of Federal Gas Tax Funding brings the City closer to this goal. In 2013, the City's capital budget for infrastructure reinvestment is $8.7 million with the inclusion of Federal Gas Tax Funding.



With approximately 17,000 connected users, each user's investment is $30,000 with the infrastructure deficit totalling over $7,500 per user. To achieve industry standards for infrastructure reinvestment through user pay, the City would require $600 annually per user solely for infrastructure reinvestment.



Based on life cycle alone, the infrastructure deficit report card shows that over half of the City water and sewer infrastructure is close to or has passed its recommended useful life. This does not mean that the infrastructure is inadequate or is not providing safe services; it means that the City is spending more money on operations that could be used for infrastructure reinvestment.

The greatest concern surrounds the underground infrastructure. This is a much greater portion of the system's infrastructure. While a significant portion of the infrastructure is not past recommended useful life, if we do not strategically address the issue, that cross-section of infrastructure will deteriorate to unmanageable levels. This will cause more issues with breaks and fixes that require attention and can be costly to both the City and customers.

In addition to the existing infrastructure requiring maintenance and replacement, there are still some areas of the City that do not have water and sewer services available or the system is in some way deficient. Due to the fact that there is a large infrastructure deficit that needs to be addressed for existing infrastructure, it is difficult to address many expansion projects. The City's 2013 budget has 94% of the pay-as-you-go capital funding program allocated to replacement with 6% for extension of new infrastructure.

It is recommended that a minimum of 90% of the pay-as-you-go capital allotment each year be allocated to infrastructure renewal leaving a maximum of 10% for infrastructure extension. This would allow for planned and phased expansion projects within the funding allocation.

This consistent allotment will help to ensure that old infrastructure is being replaced, while allowing the City to continue to expand the system where it is currently missing key components. See *Appendix II* for key target areas for infrastructure reinvestment and expansion over the next 10 years.

While infrastructure in new developments is fully funded upfront by developers, this adds new users to the systems, and the new infrastructure then needs to be maintained in perpetuity. It is important that this is kept in mind and the City starts planning for the replacement of this infrastructure in the future in order to reach full sustainability. By doing so, this will lessen the burden on future generations.

While the infrastructure deficit is based on existing infrastructure, consideration must be given for changes required to infrastructure to address climate change, laws and regulation changes to reduce environmental impact and to protect the environment. While the full impact of these changes is not

fully known, these factors cannot be ignored and the Plan must adapt in order to accommodate these changes over time.

Due to past prudent management of the systems, the City has the benefit of having infrastructure in place that allows the City to adapt more quickly to new Federal safe drinking water and wastewater treatment regulations than many other municipalities. Standards issued by the Canadian Council of Ministers of the Environment (CCME) relating to wastewater will have a much smaller impact on the City of Fredericton than many other municipalities across Canada.

It is estimated that in order to comply with these new standards, the City will need to invest $6 - $8 million in areas such as the Lincoln Lagoon and Garden Creek Lagoon. These changes, by law, must be addressed as early 2020 and as late as 2040 depending on the risk assessment of the system. Due to the fact that these new regulations are above and beyond the City's current standard, the City will be working with other levels of government to fund these changes. This will allow the City to lessen the funding burden on the user.

Billing

A typical City of Fredericton quarterly water and sewer bill has three main components:

- Meter rental charge – this charge varies by size of meter
- Quarterly Service charge – this charge is a flat rate charged to all users for both water and sewer service
- Commodity charge – this is a rate charged per cubic meter (m^3) for both water and sewer supply

Based on the industry standard usage of 272 m^3 per household of four people, the average annual charge for water and sewer services equates to $718 or $179.50 quarterly. Based on actual consumption data for 2012, the average Fredericton household consumes just over 194.55 m^3 of water annually. This usage equates to an average annual bill of $591 or $147.85 quarterly.

Connected but unmetered customers have full use of the system, however, there is no meter installed on the property and consumption cannot be monitored. The rates for this type of customer are set to mirror what the water and sewer bill would be for a user based on the industry standard usage of 272 m^3 annually for an average family.

Unconnected customers are those that have services running adjacent to their property but are not connected to the system. These customers pay the equivalent of the quarterly service charge.

Rates

History

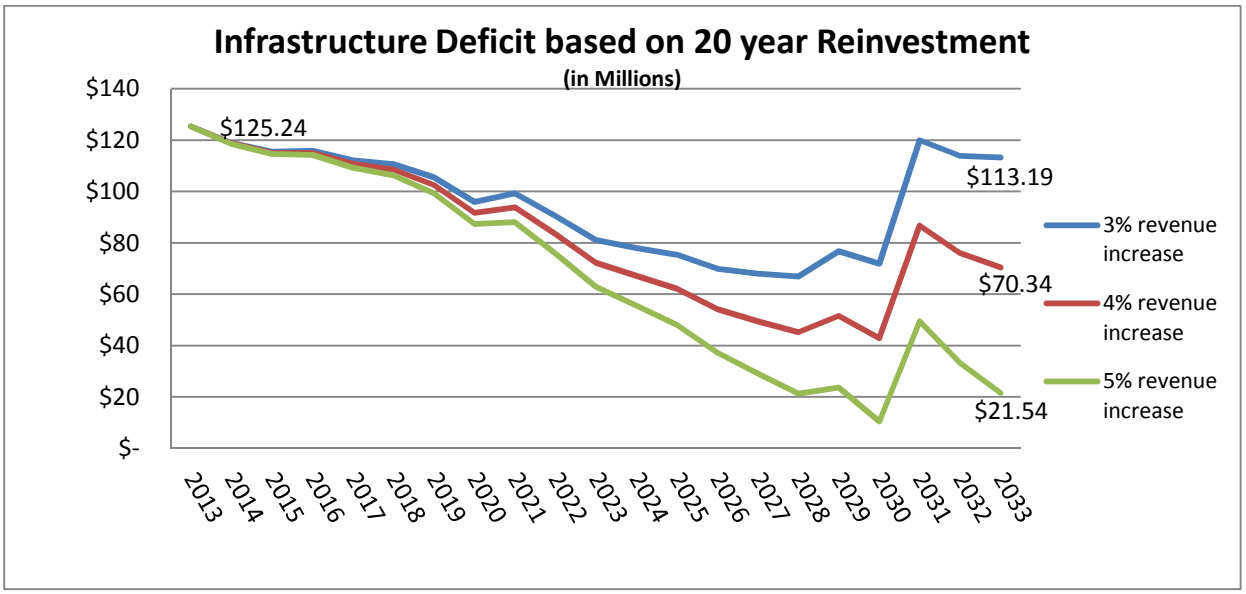
Between 1997 and 2004 there were minimal water and sewer rate increases. In 2005, the City recognized the need for additional revenue in order to continue with the high level of service provided. As such, there were four years of volumetric rate increases of 2¢ per year for 2005 – 2008.

In 2008, it was determined that the increase was not sufficient to maintain operations, and address infrastructure renewal and extensions. As such, Council at the time agreed to a five year rate strategy that provided an inflationary increase of 2.5% and an incremental increase of 5% in order to start addressing the infrastructure reinvestment backlog (infrastructure deficit). This strategy covered the period of 2009 – 2013.

As 2013 is the final year for this strategy, it is important that a longer term view is taken on how rates should be structured in the future. This Plan shows that in order to continue with a solid infrastructure reinvestment strategy, additional revenue is required. The objective is to continue with predictable and manageable increases to avoid rate shock while continuing to provide a high quality of service.

Recommendations

Based on the Plan forecast, it is recommended that the City increase revenue by 5% each and every year for the life of this 20 year plan. This allows the City to properly address the infrastructure deficit and allows for stable rate increases. Increasing revenue by 3% will maintain the status quo for the deficit, 4% revenue increases will reduce the deficit but will still leave a significant amount of old infrastructure, while a 5% increase in revenue annually will effectively eliminate the deficit in 20 years. The recommended increase will also provide for continued funding towards infrastructure renewal and expansion for future generations.

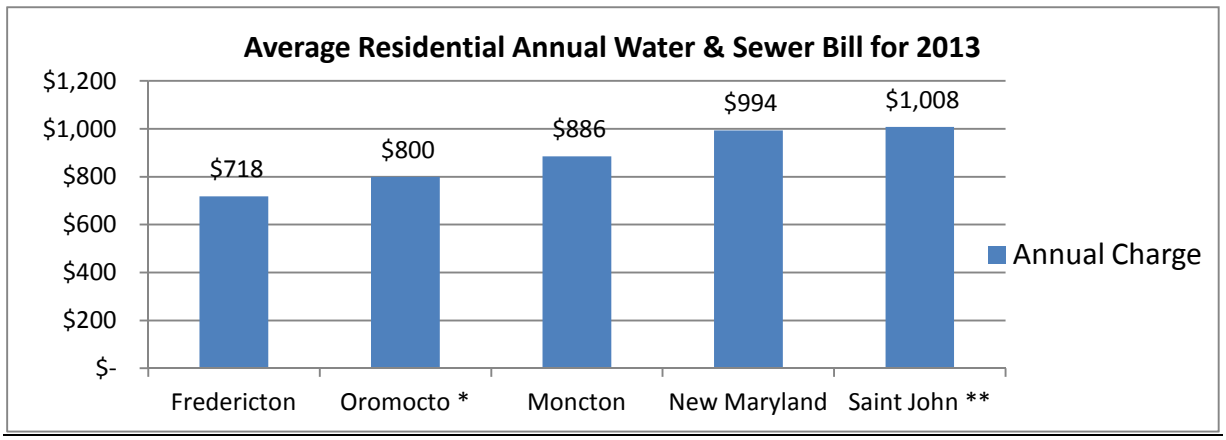


The benefit for City of Fredericton customers is that unlike other municipalities in Canada and the US, the City can achieve the goals of the Plan through smaller and predictable rate increases over time. For example, the City of Halifax has requested rate increases to meet system demands of an additional 9.5% and 9.8% for water services for fiscal years 2013/2014 and 2014/2015 respectively and 15% and 21% for sewer services for fiscal years 2013/2014 and 2014/2015 respectively[2].

Each year the Plan forecast is updated through the budget process. The current status of the system, infrastructure reinvestment requirements and revenue and funding needs are reviewed to assess the progress in achieving the goals of the Plan. It is important that a long term financial plan be flexible and adaptable to change with the economic environment.

Current Comparative Rates with other New Brunswick Municipalities

The City of Fredericton has the lowest residential water and sewer bills of the three largest municipalities in New Brunswick. City of Fredericton residents also pay less for water and sewer services than residents of nearby Oromocto and New Maryland.



**Majority of wastewater treated at CFB Gagetown* ***Flat Rate charged to majority of users*

The comparative rates are based on the industry standard of 272 m^3 for a single family of four.

Rate Recommendations

The Plan is a 20 year plan to provide safe and sustainable systems while maintaining rates at a level that is affordable and predictable for the customer. The rate recommendations that are included with this plan have been limited to five years due to the fact that as more information is obtained surrounding change to the number of connections, consumption and spending trends, the components for revenue generation will we reassessed.

[2] Nova Scotia Utility and Review Board Decision 2013 NSUARB 127 M05463; http://nsuarb.novascotia.ca/sites/default/files/decisions/hrwc_decision-_june_24.13.pdf

With the movement to conservation measures, more efficient appliances and the trend of smaller families, there has been a downward trend in consumption of water per customer in recent years. While the City of Fredericton has not noticed drastic declines, it is important that revenue generated match expenses for fixed versus variable costs. Currently, more revenue is generated based on the volumetric consumption by customers than by the base rates. The fixed expenses, however, are proportionately greater than the variable expenses.

It is recommended that revenues are adjusted to reflect the fact that, over time, if consumption does decrease as a result of conservation, that revenues are impacted proportionately to adjustments in expenses for provision of water. As such, recommended adjustments to rates will balance the fixed versus variable ratios for revenues and expenses. This allows for better matching and ensures a consistent funding model for reinvestment in infrastructure.

Quarterly Rates – it is recommended that the majority of the adjustment to revenue is related to the fixed quarterly rates for both water and sewer services to close the gap between variable and fixed revenues and expenses. As such, the quarterly rate increases recommended for the next five years are as follows:

Year	Quarterly Rate
2014	$36.31
2015	$39.84
2016	$43.64
2017	$47.73
2018	$52.13

Meter Rental Rates – it is recommended that the meter rental rates remain unchanged at the following amounts:

	Meter Size	Quarterly Rate
Residential	20 millimetre or smaller	$2.00
Commercial	25 millimetre	$3.00
	40 millimetre	$6.00
	50 millimetre	$9.00
	75 millimetre	$30.00
	100 millimetre	$40.00
	150 millimetre	$60.00
	200 millimetre and greater	$80.00

Commodity Charge – due to the fact that there is a mismatch between revenue generated on a variable versus fixed basis and the expenses incurred on a variable versus fixed basis, it is recommended that the variable commodity charge be adjusted at a lower rate than the quarterly service charge. This change will better reflect the fact that as users become more conservative with water usage, the utility will generate sufficient base revenue to cover the fixed costs associated with the services.

In order to promote conservation efforts by customers, it is recommended that the commodity charge for both water and sewer consumption increase by 1¢ each year. The current commodity charge for metered users is $0.82 per m^3 for both water and sewer consumption based on meter readings.

Water & Sewer 5 Year Rate Strategy

	Actual	RECOMMENDED				
	2013	**2014**	**2015**	**2016**	**2017**	**2018**
Water rate (per m^3)	$0.82	$0.83	$0.84	$0.85	$0.86	$0.87
Sewer rate (per m^3)	$0.82	$0.83	$0.84	$0.85	$0.86	$0.87
Water & Sewer Rate	**$1.64**	**$1.66**	**$1.68**	**$1.70**	**$1.72**	**$1.74**
Quarterly Service Charge	**$66.10**	**$72.62**	**$79.68**	**$87.28**	**$95.46**	**$104.26**
Quarterly Meter Rental	**$2.00**	**$2.00**	**$2.00**	**$2.00**	**$2.00**	**$2.00**
Annual Cost *	**$591**	**$622**	**$654**	**$688**	**$725**	**$764**
Percent Increase	*7.6%*	*5.1%*	*5.2%*	*5.3%*	*5.3%*	*5.4%*

** For a typical family based on 195 m^3 consumption for each of water and sewer.*

With the recommended rate increases for the 5 year period, the City of Fredericton rates will still be lower than those charged by both Saint John and New Maryland today. It is also important to note that as other municipalities progress in asset management, address infrastructure deficits and comply with Federal safe drinking water and wastewater treatment standards, their rates will most likely increase substantially over time.

Flat Rate for Unmetered Customers – At the end of 2012, there were 45 unmetered connections to the City's water system and 54 unmetered connections to the City's sewer system. The City has been working to reduce the number of unmetered customers as it does not meet the equality principle whereas unmetered customers have no incentive to conserve water as they are not paying a volumetric charge. It is recommended that the flat fee be based on what an industry average single family of four would typically use. The current rate is $57.72 for each service per quarter. The recommendation is that the quarterly flat rate for each service increase as follows:

Year	Flat Rate
2014	$58.44
2015	$59.12
2016	$59.80
2017	$60.48
2018	$61.16

Commercial Bulk Water Rates – the current bulk water rate is $1.00 per m^3. This rate was initially set in the 1990's to be two times the commodity rate for water, which at the time was $0.50. It is recommended that the bulk water rate increase to be the equivalent of two times the commodity rate for water plus a premium rate to fully recover the cost of operating and capital replacement of the filling stations for a total of $2.19. This rate will reflect the fact that the City maintains the seven dedicated

filling stations for these customers on top of the provision of the bulk water. It is also recommended that as commodity rate increases occur in the future, that the bulk water rate increase accordingly to a cost of $2.27 per m^3 at the end of the five year rate strategy.

To fill a large tanker truck costs $20 per load while the delivery fee charged is $220 - $360 depending on distance travelled. The adjusted fee will result in an additional $23.40 in 2014 for a total cost of $43.40. The cost of the water is a small percentage of the total cost for the company to provide the service. It is also important to note that the majority of end consumers of this service are outside City limits.

Commercial Business Private Hydrant Fee – for consistent fire protection, the City maintains both public and private hydrants throughout the City. For all City owned hydrants, the General Fund through property tax revenue, pays $1,000,612 annually to the Water and Sewer Fund for hydrant maintenance for Fire Protection. This equals $498.81 per hydrant and includes costs for all hydrant maintenance including snow removal. For privately owned hydrants, mainly commercial properties, the City currently charges $250 per hydrant annually. The private hydrants are maintained to the same standard as the City owned hydrants with the exception of snow removal. It is therefore recommended that the rate be increased to better reflect the cost of the service provided and adjusted for the snow removal component. It is recommended that the rates be increased to $350 starting in 2014.

Building Fire Protection Service Fee – It is recommended that the City introduce a new Building Fire Protection Service Fee to customers with large fire protection systems (sprinklers) installed. These customers are typically commercial or multi-unit residential properties that are required to have sprinkler systems due to Building Code. In order to provide adequate service for these systems, the City is required to provide both infrastructure and water supply that is above what would typically be required for an average customer. By introducing this fee, it will achieve a more equitable balance of revenue by customer for the services provided.

Due to this additional safety requirement, building owners with a fire protection system receive building insurance premium discounts on their properties.

It is recommended that the fee be $150 per year for each sprinkler system. For comparative purposes, similar charges in Halifax, NS are in the range of $170 - $218, Hamilton, ON rates range from $3 - $192, London, ON rates vary between $15 - $500 and Lethbridge, AB charges between $365 - $2,664.50.

Missed Appointment Fee

City staff set appointments with customers to test and/or replace water meters to ensure the meters are in proper working order. If the customer confirms the appointment and then misses the appointment to meet with staff, this takes the staff member away from other appointments or duties.

As such, it is recommended that the City introduce a Missed Appointment Fee to address this inefficiency as a result of having missed appointments without a minimum of 24 hours notice. It is recommended that the fee be $50 per missed appointment.

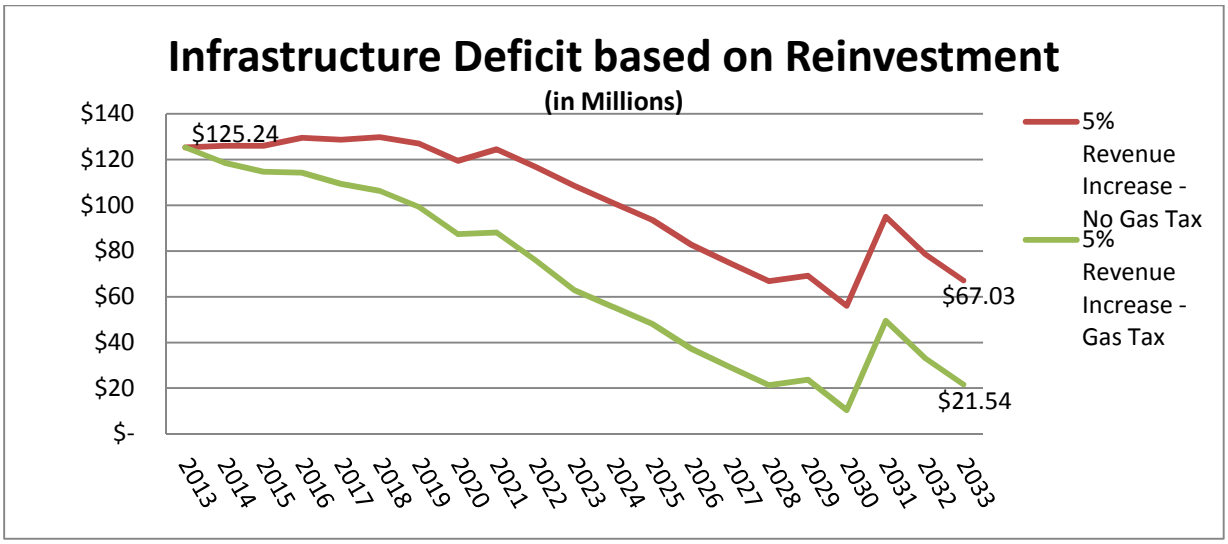
Funding for Reinvestment in Infrastructure

Recently, there were long term infrastructure funding announcements from the Federal Government. One of those funding announcements was the permanent continuation of the Gas Tax Funding Program. The last round of Federal Gas Tax Funding from 2010 – 2013 has allowed the City to invest an additional $14.8 million into infrastructure reinvestment and extension. These are projects that the City needed to do but without this funding would have resulted in delays to the projects. These projects include:

- Springhill Reservoir
- Northside Sanitary Trunk
- Friel Street Water and Sanitary Sewer
- Longwood Drive Water and Sanitary Sewer
- Edinburgh Street Water and Sanitary Sewer
- Clark Street Water and Sanitary Sewer
- Regent Street Water and Sanitary Sewer
- Westview Street Water and Sanitary Sewer
- William Street Water and Sanitary Sewer
- Wright Street Water and Sanitary Sewer
- Parklyn Court Water and Sanitary Sewer
- Hanson Street Water and Sanitary Sewer
- McAdam Avenue Water and Sanitary Sewer
- Clarence Avenue Water and Sanitary Sewer

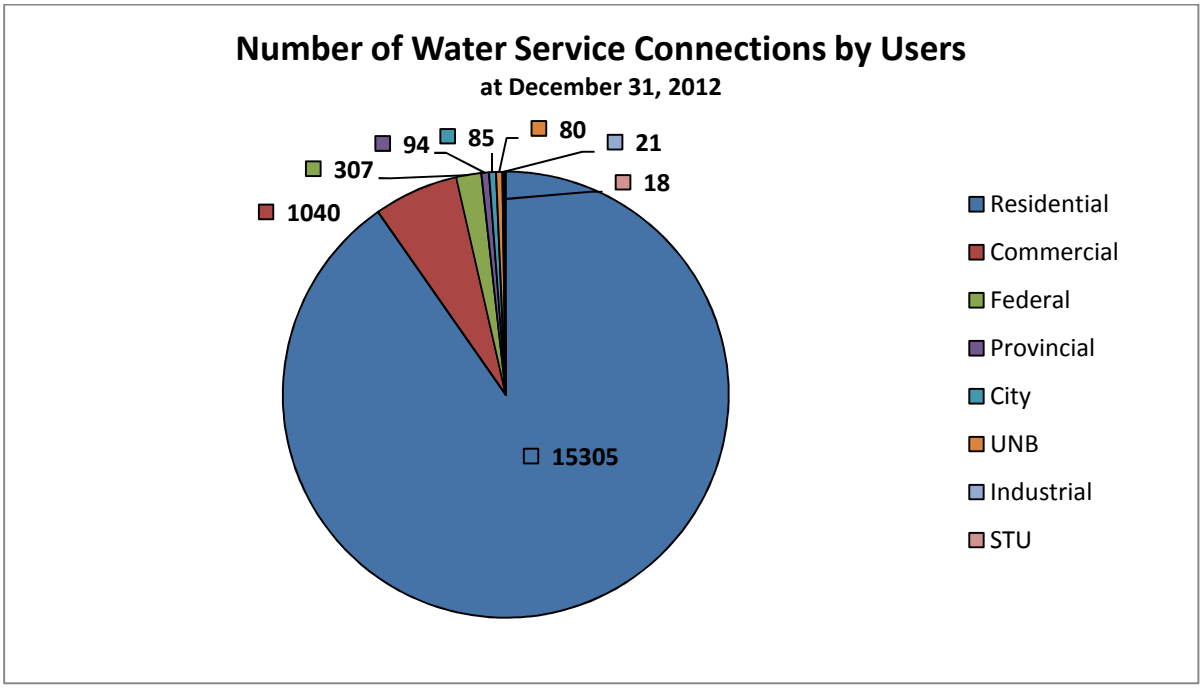
It is recommended that they City continue to apply Federal Gas Tax Funding dollars to water and sewer infrastructure renewal for the next 10 years. There are a number of benefits to this funding strategy that include but are not limited to:

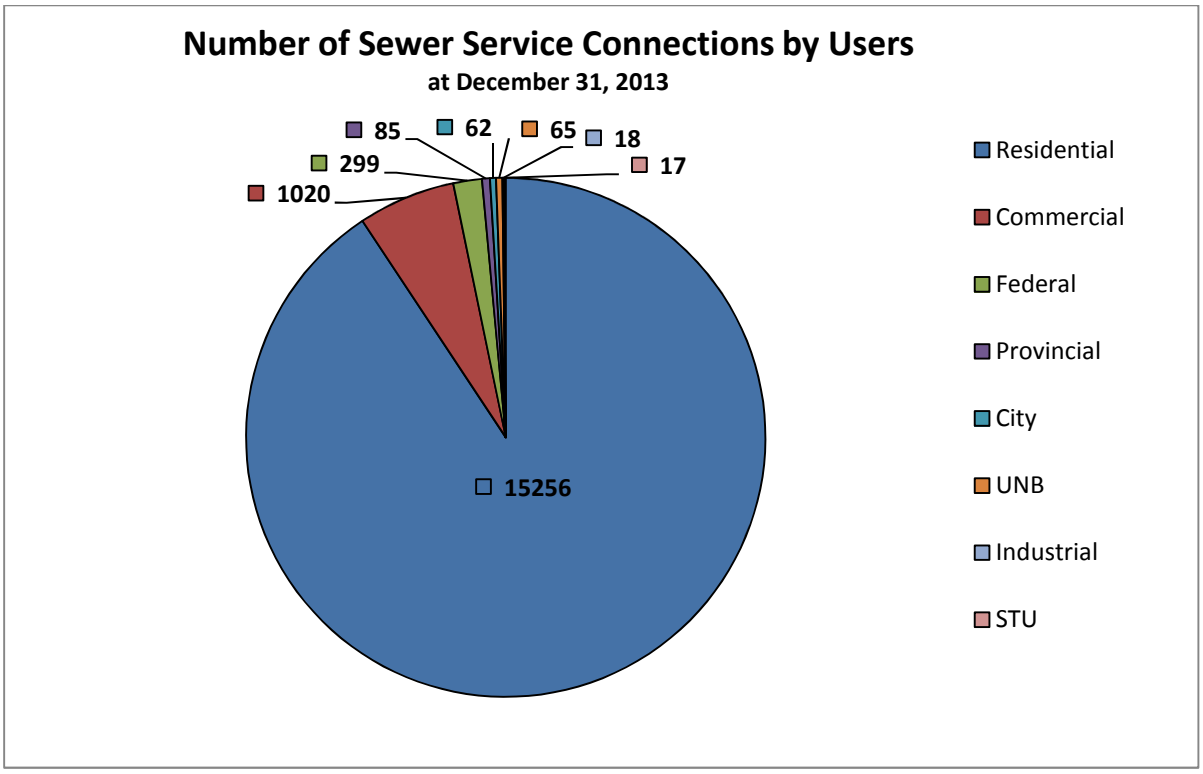
- Allowing the City to continue a more progressive and focused infrastructure renewal program to address the $130 million infrastructure deficit
- Reducing operating costs by replacing problem infrastructure quicker than would be addressed with the regular capital budget, thereby reducing the number of costly breaks in the system
- Not adding to operating costs as the costs to maintain the infrastructure is already included for existing infrastructure, and;
- Allows lower rate increases for customers by offsetting some of the required revenue though the Federal Gas Tax Fund

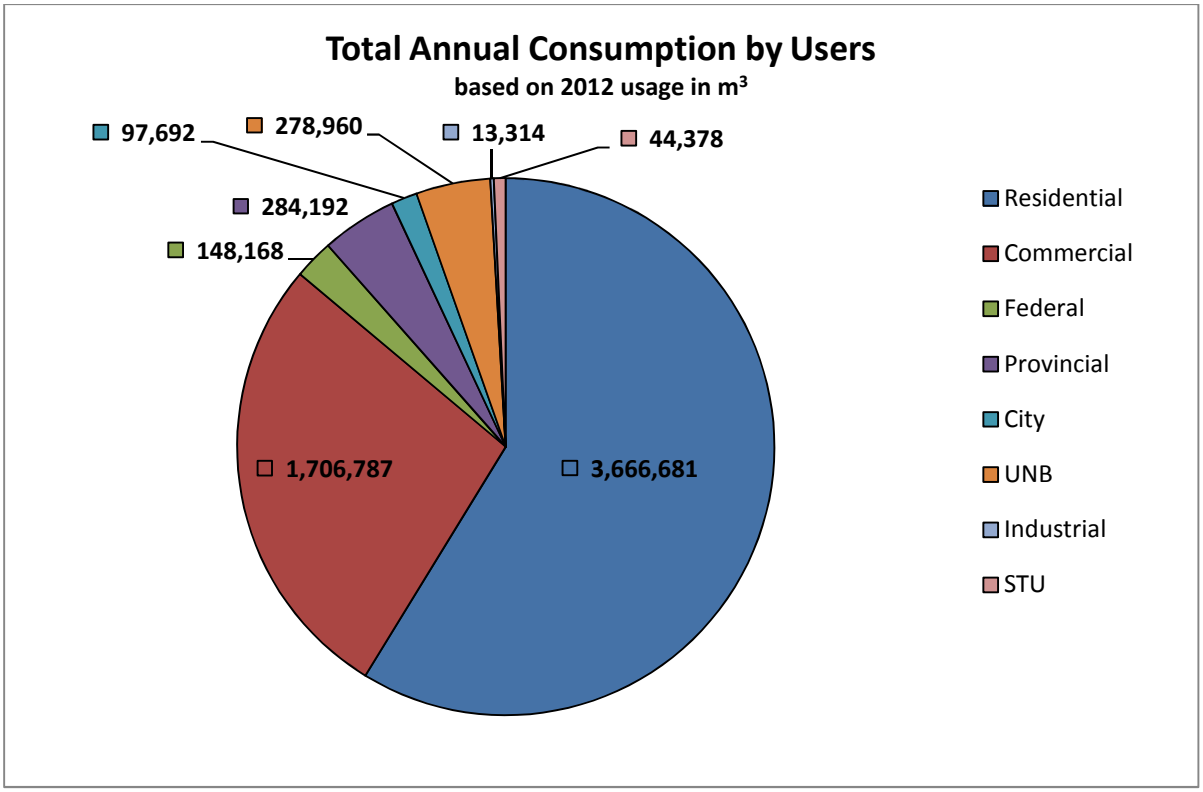


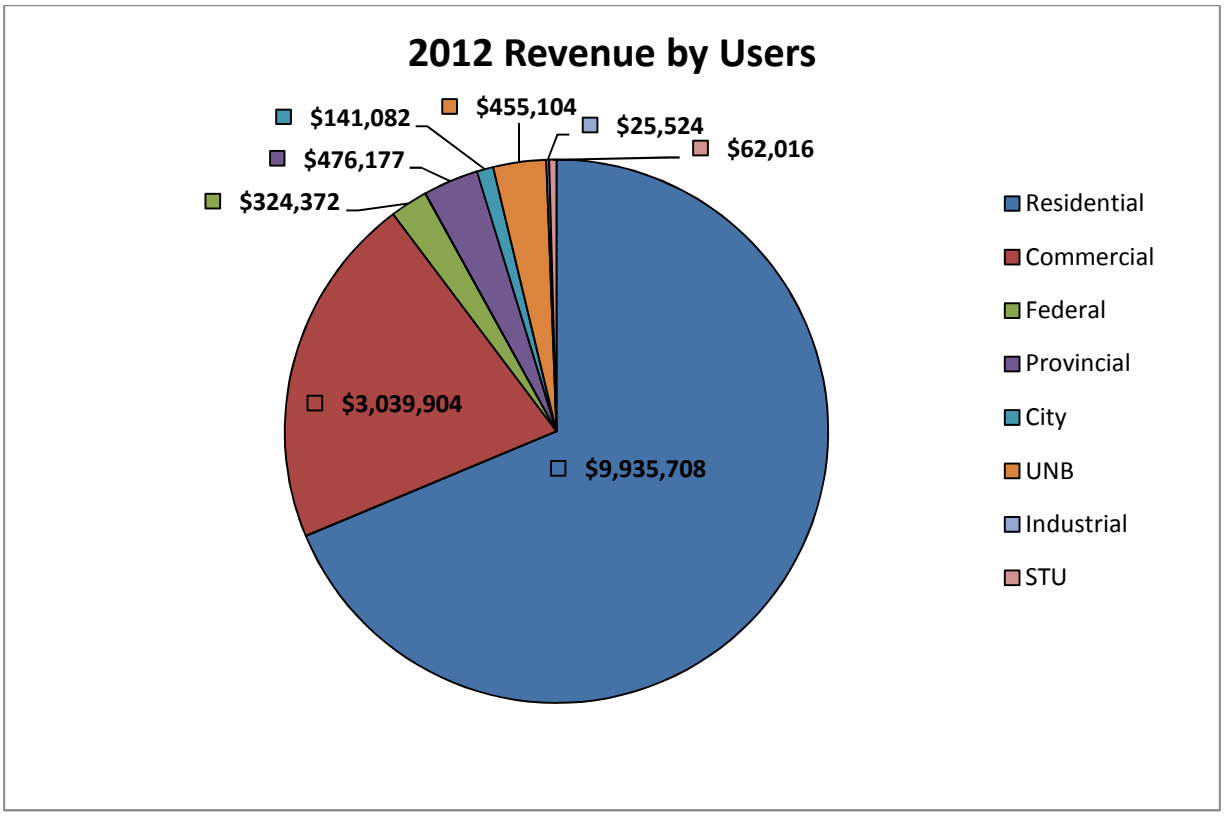
Equity for All Users

Currently, residential customers are the largest customer group based the number of connections, the water consumed and revenue received for the services provided.




Number of Sewer Service Connections by Users
at December 31, 2013
85
62
65
18
299
17
1020
15256
Residential
Commercial
Federal
Provincial
City
UNB
Industrial
STU


Total Annual Consumption by Users
based on 2012 usage in m3
97,692
278,960
13,314
44,378
284,192
148,168
1,706,787
3,666,681
Residential
Commercial
Federal
Provincial
City
UNB
Industrial
STU



While commercial customers use a larger proportion of water and sewer services based on volume, there is a larger proportion of infrastructure installed for supplying water and sewer services to residential customers. It would be difficult for the City to justify different rates for commercial versus residential customers due to the fact that the majority of the infrastructure investment and reinvestment required relates to residential connections. As such, it is recommended that rates based on user group should not vary.

Key Performance Indicators

There are a number of key performance indicators that will enable Council and customers to monitor the success of the Long Term Financial Plan. First and foremost will be maintaining the efficient and quality service that is currently provided to customers through the high quality drinking water the City provides to the treatment of wastewater within the standards and recommended practices of the industry. This will be measured through routine testing of systems to ensure compliance with standards surrounding treatment. In addition, a measure will be to have 100% customer confidence with the City's water quality.

Another key measure is the state of the infrastructure through the dollars invested, the impact on the infrastructure deficit and the overall condition of the systems. A key goal of the infrastructure reinvestment will be the reduction in the number of breaks and fixes the City addresses each year. A direct result of this will be the amount of operating dollars that can be reallocated from these repairs to capital reinvestment. The state of the infrastructure report card and infrastructure deficit will be tracked

annually to assess progress made. A direct measure will be the changes to the state of the infrastructure categorized between good, fair and poor condition.

Avoidance of rate shock is imperative to customers. This will be achieved by obtaining funding from other levels of Government to address CCME standards as well as working towards efficiencies that will reduce the impact on the customer. Rates will remain competitive with surrounding areas and within the Province and will be reassessed on an annual basis to look at affordability to the customer.

Conclusion

The City is taking a long term planned approach to protect the significant investment in the infrastructure today to ensure sustainability for the next generation. Through gradual user rate increases and funding from Federal Gas Tax, the City will continue to provide safe, reliable, quality water and environmentally sound wastewater treatment. This will allow for proper maintenance of the systems as well as strategic and timely infrastructure reinvestment.

In order to achieve long-term sustainability, it is recommended:

- that water and sewer revenue increase annually by 5% for each of the next 5 years. The following guidelines are recommended:
    - the rate increases be applied to the quarterly base fee and the commodity charge;
    - the rate for private hydrants will be increased to a level consistent with the costs associated with City hydrants less the cost of snow removal;
    - the rate for bulk water be increased to the equivalent of two times the consumption rate for water per m^3 plus a premium rate to recover the cost of operating the fill stations and adjusted annually as the consumption rate increases;
    - a new Building Fire Protection System Fee be introduced;
    - a new Missed Appointment Fee be introduced for customers who are not available for a scheduled appointment and do not give a minimum of 24 hours notice
- that the pay-as-you go capital program provide for a minimum reinvestment of 90% for infrastructure renewal leaving a maximum of 10% for extensions to the systems
- that the City apply the next 10 years of Federal Gas Tax Funding to water and sewer infrastructure reinvestment projects to address the infrastructure deficit, and;
- that in order to address changes to federal CCME environmental standards, the City will actively pursue other levels of government funding

Funding	
User Rates/Fees	on-going operating, maintenance and infrastructure renewal
Federal Gas Tax Funding	address infrastructure deficit
Other levels of government funding	address Federal CCME standard requirements and large expansion projects

Customers of the City of Fredericton's water and sewer services should feel secure knowing that the dollars they invest in the water and sewer services they receive are spent with their best interests in mind. By continuing with committed infrastructure renewal while working towards efficiencies to reduce the impact on the customer, the City is building and rebuilding a better system not only for the customers of today, but for the next generation. In doing so, rates will remain affordable and predictable now and in the future.

Definitions

Affordability: the ability of customers to pay for water and sewer services for both operating and capital reinvestment in proportion to other expenses.

Asset Management: managing capital infrastructure to deliver sustainable services. Managing means determining optimal timing for purchase, maintenance, operation, renewal, replacement and decommissioning of capital infrastructure. It also includes optimizing the balance between maintenance and capital reinvestment.

Capital/Infrastructure: tangible capital assets or physical assets that the City owns and controls.

Fixed Costs: all costs that do not fluctuate based on the volume of service provided (in this case, water provided or wastewater treated).

Flexibility: the ability of the City to adapt to changing economic and environmental conditions that require adjustments to be made to the Long Term Financial Plan.

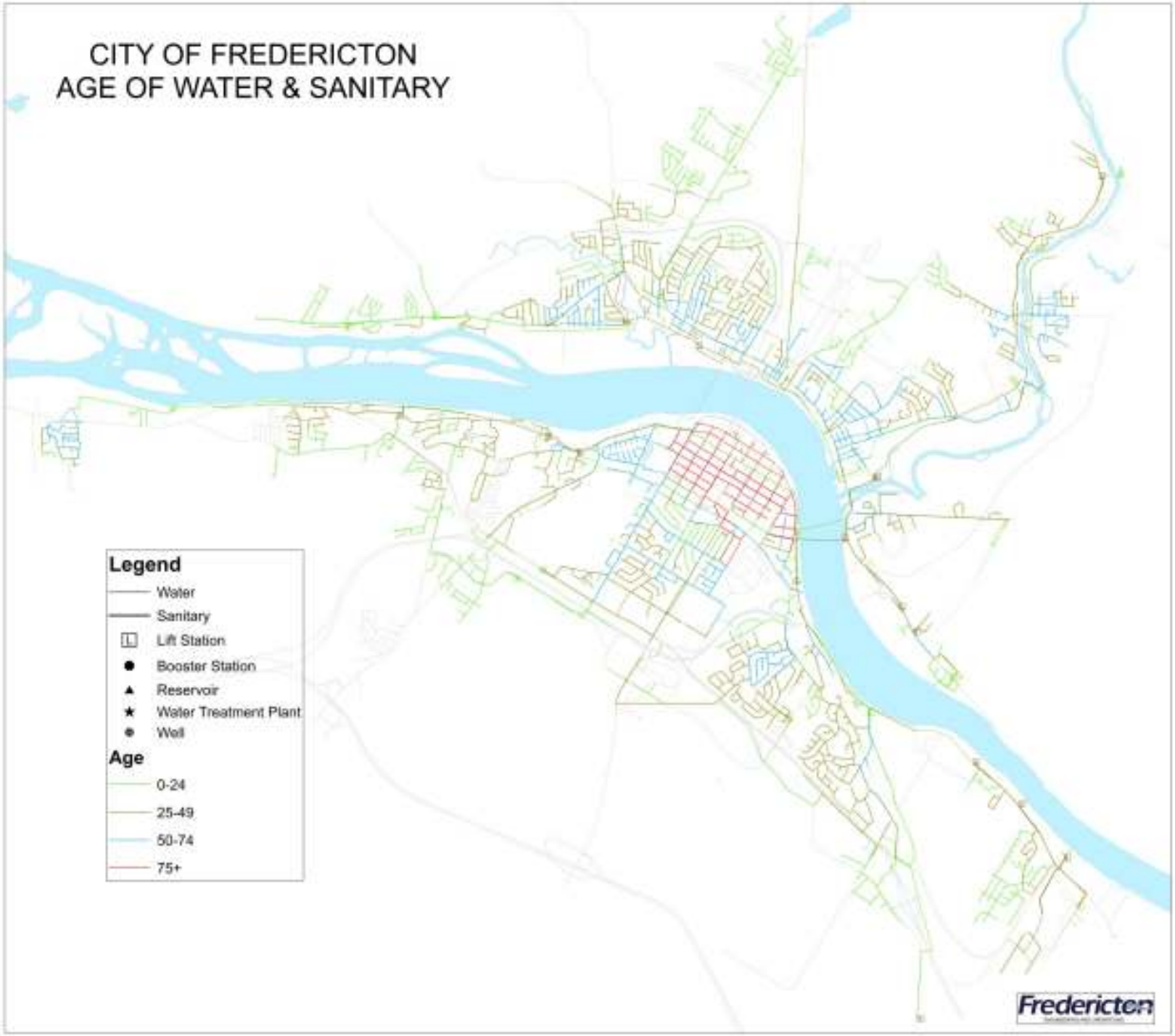
Infrastructure Deficit: unfunded backlog of existing capital assets needing replacement due to reaching the end of useful or service life based on industry standards and past experience.

Lifecycle Cost: the cost of infrastructure over its useful life including the upfront purchase or construction cost, ongoing operating and maintenance costs and eventual renewal.

Long Term Financial Plan: a strategic approach to identifying and addressing financial challenges through a financial condition analysis, forecasting and analysis and financial policies.

Sustainability: meeting present needs without compromising the ability to meet future needs. Spending the right money, at the right time, on the right things.

Variable Costs: all costs that fluctuate with the volume of service provided. These can include but are not limited to chemicals to treat water and wastewater, overtime and operating costs relating to breaks and fixes.



APPENDIX I –

AGE OF WATER AND SANITARY SEWER INFRASTRUCTURE

APPENDIX II –

FUTURE PLANNED INFRASTRUCTURE INVESTMENT