City of Charlottetown

Debt Review

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MacPherson Roche Smith & Associates
Chartered Accountants and Management Consultants

70 Kent Street, Suite 200
Charlottetown PE
C1A 1M9
Tel.: 902-566-2566 Fax: 902-368-3558
mrs@mrspei.ca
www.mrspei.ca

Appendices

EXECUTIVE SUMMARY

After the debt and deficit scares of the 1990's, and the fiscal belt tightening that followed, conventional wisdom moved from long-term borrowing to a "Pay-As-You-Go" mentality. This called for all local government expenditures, including capital assets and infrastructure projects, to be made from current revenues.

In more recent years, there has been a shift in leading municipal debt opinion to that of "smart" debt, which encourages support for long-term borrowing as a valid and financially responsible form of infrastructure and capital asset financing, recognizing that Pay-As-You-Go simply cannot accommodate the major and often urgent capital asset and infrastructure needs of Canadian municipalities. This concept is built around five elements, including: appropriate projects (long useful lives, capital intensive), optimal debt levels (limiting long-term debt in relation to other significant factors), amortization (useful life of the capital assets), debt structure and technique (municipal bonds, TIF bonds, revenue bonds), and repayment (funded from operations).

The City of Charlottetown's Capital Debt Reduction Strategy (CDRS) was announced as part of the City's 2006 budget. The CDRS was intended to ensure that the City's total long-term debt would not increase beyond the balance outstanding at December 31, 2005 by limiting the capital expenditures each year to the amount of long-term debt being retired. This strategy was to take place from 2006 until 2009. Commencing in 2010, it was recommended that the City adopt a Pay-As-You-Go policy, under which capital expenditures would be paid for from operating revenues. In 2011, the City developed a five year capital plan which is used as the basis for its annual capital budget and is the best indicator of the City's financing requirements over the short-to-medium (1-5 years) term. This plan outlines the following:

Capital Plan Costs – City Portion
(in $ millions)

	2012	2013	2014	2015	2016
Capital Budget	15.0	14.9	11.4	11.3	15.9
Less: Building Canada	0.0	0.0	0.0	0.0	0.0
Less: Gas Tax Fund	3.1	3.1	3.1	3.1	3.1
Less: Provincial funding	1.9	0.0	0.0	0.0	0.0
Total City portion	10.0	11.8	8.3	8.2	12.8

If the City were to adhere to a Pay-As-You-Go approach for the 2012 to 2016 fiscal years, as recommended in the CDRS, it could require $8-$12 million per year in funding out of the operating budget in order to meet the proposed capital budget. This represents 16-24% of the City's 2011 revenues excluding the Federal Gas Tax funding. Given the City's budgeted operating expenditures, this level of capital asset funding would simply not be possible. A Pay-As-You-Go approach is not in line with current municipal debt management best practices and would either require a decreased capital budget, or significantly increased taxes. Furthermore, the City of Charlottetown, in common with

most Canadian municipalities, faces a significant infrastructure deficit; particularly in terms of water and sewer infrastructure and, to a lesser extent, City Government infrastructure such as the Fire Hall Station replacement, transit bus replacements and parking garage upgrades. Undertaking these challenges represents significant costs; however, not undertaking these necessary projects within a reasonable time frame also carries significant costs. These "deferral" costs include negative impacts on economic growth, property values and population growth within the municipality, as well as inflation with respect to the eventual cost of deferred capital projects.

Current best practices around debt financing in Canadian municipalities appears to focus on the question of, "How much debt is appropriate?". Canada West Foundation makes the point that "runaway" debt and a "debt-free" city are both extremes to be avoided, and that a reasonable and sustainable level of debt (the appropriate level) lies somewhere between these two poles.

Many Canadian municipalities have adopted a combination of specific financial ratios or indicators to provide guidance and limitations in determining acceptable levels of debt outstanding and sustainable levels of debt service on this outstanding debt. The specific ratios or indicators chosen vary among municipalities and are superseded by governing provincial legislation in all Canadian provinces (see Section 3.2.5 Debt Policy Compliance).

At present, the majority of municipalities in Canada use some form of long-term debt financing for acquisition of major capital assets and infrastructure projects. There has been an apparent "buy-in" to the Benefit Model of public finance and its core principle of Fairness (Equity) with respect to spreading the burden of capital assets and infrastructure projects equitably over their useful lives reflecting a "beneficiary or user pay" principle. In essence, this means that municipalities tend to favor a Pay-As-You-Use policy, rather than a Pay-As-You-Go policy.

When analyzing the level of debt outstanding, the City's total liabilities is not an appropriate or accurate indicator of the City's financial position, as it takes into account all amounts owed without taking into account offsetting financial assets that are available to repay these liabilities. For purposes of the review of the City's debt in light of its infrastructure requirements, long-term debt associated with capital projects is the most appropriate measure of the City's debt level. This measure has increased 9.7% from 2007 to 2011 from $70.2 million to $77.0 million. At the same time, the debt service costs per capita have declined by 27% over the same period. This means that while the absolute level of debt has increased, it has become more serviceable. Charlottetown has seen improvements in all debt ratios measured, as shown in Section 6.1. Charlottetown's debt trends are also favorable compared to the trends in similar municipalities in the Atlantic Region, including Moncton, NB and Fredericton, NB, as seen in Section 6.2

With these principles in mind, and after analyzing the City's current level of net debt outstanding (see Section 6.0 City of Charlottetown Debt Benchmarks), it is in our view

that the City's net debt outstanding at December 31, 2011 is appropriate in relation to the City's assets and its ability to service the debt. The CDRS, which the City intended to employ during 2006-2009 fiscal period, although no doubt well-intentioned, was neither viable nor sustainable. We suggest that the City prepare and adopt a comprehensive set of **guidelines** with respect to both capital asset planning and debt management principles.

1.0 INTRODUCTION

1.1 Assignment

The Administrative Services Committee of the City of Charlottetown (the City) have requested MacPherson Roche Smith & Associates to undertake a comprehensive review of the City's current and expected future long-term debt position with particular emphasis on:

- The appropriateness, in terms of good financial management, of the level of debt outstanding;
- The appropriateness, in terms of good financial management, of the methods and policies employed to finance the City's capital asset and infrastructure requirements; and
- The impact on the City's level of debt outstanding of the expected level of capital asset and infrastructure requirements for future years.

1.2 Scope

In conducting this Assignment, the City has requested that MacPherson Roche Smith & Associates:

- Examine prior years (2007 – 2011) consolidated financial statements of the City of Charlottetown, which include the accounts of the City of Charlottetown and the Charlottetown Sewer and Water Corporation;
- Examine the City's existing long-term debt and annual debt service obligations;
- Examine the City's past and current policies (both formal and informal) and provincial legislation with respect to funding capital asset and infrastructure expenditures;
- Examine relevant metrics influencing the City's financial planning and management, including property tax assessments, population, interest rate expectations, capital budgeting priorities and capital cost estimates;
- Examine the City's capital budgeting process and its decision making process with respect to financing capital acquisitions;
- Examine the practicality and viability of the Capital Debt Reduction Strategy announced with the City's 2006 budget and of the intended adoption of a "Pay-As-You-Go" policy/strategy for fiscal years subsequent to 2010 to fund major capital assets and infrastructure; and

- Conduct a high-level literature review with respect to current municipal financing strategies and best practices for financing large capital expenditures, and for managing the level of debt outstanding and debt service requirements.

1.3 Objectives

The primary objectives of this comprehensive review are:

1. To provide an assessment of the appropriateness of the level of the City's outstanding long-term debt, and the debt management strategies and policies currently employed to finance major capital assets and infrastructure projects.
2. To research and identify current "best practices" with respect to financing the City's capital assets and infrastructure projects.
3. To recommend a viable and sustainable debt management policy framework with respect to financing the City's capital assets and infrastructure projects.

2.0 THE DEBT DILEMMA

2.1 Background

The debt dilemma facing the City of Charlottetown is one which challenges municipalities across the country. There appears to be an ever present requirement for municipalities to invest in infrastructure. The need is highlighted by what has come to be known as the "infrastructure deficit" – the gap between service requirements in light of forward planning and advanced technology and the ability of existing systems to keep pace with the needs. The challenge must be met in an environment of economic uncertainty, and at a time when governments at all levels are tackling fiscal deficits and experiencing significant public resistance to strategies, which result in increasing the level of debt for government. However, governments understand that there is a significant cost to deferring much needed investment in infrastructure. It must be done, however it cannot be done without incurring new debt. This dilemma must be addressed by understanding, in a comprehensive way, the implications of incurring new long-term debt and the costs of avoiding it by deferring the required investment.

2.2 Infrastructure Defined

The generally accepted definition of infrastructure covers the basic physical systems of a country or community's population including roads, utilities, water, sewage and facilities required by essential services such as fire, recreation and public transportation. These assets are seen as providing a significant component of the foundation for the maintenance and growth of the economy. In that sense, the assets, and the investment in creating such growth, are directly related to productivity, skills development and competitiveness. These relationships create the basis for intergovernmental interest and investment. In turn, this assists with building the capacity of municipalities to take on the debt necessary to finance these investments.

2.3 Infrastructure Categories in Charlottetown

Section 21 of the Charlottetown Area Municipalities Act provides a substantive list of powers and responsibilities in those areas that require infrastructure investment. These include the following:

- Fire and Police Protection and other emergency services;
- Streets, sidewalks and related lighting;
- Recreation, Parks and open spaces;
- Public Works;
- Storm water collection and drainage; and
- Public Transportation.

Charlottetown has a five year plan for capital costs related to the ordinary capital costs associated with operations. The five year estimates of capital costs are summarized by year, as follows:

2012	$ 15,018,832
2013	14,906,628
2014	11,429,747
2015	11,254,450
2016	15,942,100
	$ 68,551,757

In addition to the foregoing five year plan, the City of Charlottetown has prepared estimates for special and significant projects over the medium term. These are listed in six categories, as follows:

Water and Sewer Significant Projects	$ 56,000,000
City Government	10,500,000
Public Works	2,750,000
Water and Sewer Utility	7,500,000
Parks and Recreation	43,400,000
Municipal Buildings	2,000,000
	$ 122,150,000

Clearly, there is a significant requirement for future capital investment to be taken into consideration in outlining the policy implications for the City of Charlottetown, especially as they relate to long-term debt financing.

2.4 Factors Creating the Infrastructure Deficit in Canadian Cities

Over the past decade, academics and financial analysts have written extensively about the circumstances that have led to the infrastructure deficit. It is generally accepted that this deficit has emerged from an environment of:

- Underinvestment in the last 20 years;
- Inconsistent participation by the various levels of government;
- Growing demand beyond the municipal capacity to respond;
- A lack of clarity in regards to the private sector role and an imbalance in terms of their inclusion;
- An emerging devaluation of infrastructure systems as technology has advanced;
- Focusing on maintenance as opposed to replacement; and

- Devolving responsibility from the senior levels of government to municipalities, unaccompanied by a corresponding shift in tax revenue sharing.

It is clear that the time has come when municipalities, including the City of Charlottetown, need to carefully consider the policies and principles which it uses to manage capital investment, and the way in which it incurs and manages long-term debt. This report addresses those basic concerns.

3.0 PUBLIC FINANCE PRINCIPLES AND ISSUES

3.1 Generally Accepted Public Finance Principles

In order to provide context for the purpose, objectives and scope of this report, it is worthwhile to consider the prevailing public finance principles with respect to local (municipal) governments in Canada. These public finance principles are attributed to the work of Dr. Enid Slack and are included in the MacPherson Roche Smith & Associates report on Provincial/Municipal Fiscal Relationships, prepared for the Capital Region Municipalities (Charlottetown, Cornwall and Stratford), dated November 20, 2008. While not a matter of legislation in Canada, it is fair to state that these public finance principles appear to be generally accepted and adhered to in most Canadian municipalities.

In terms of the public policy perspective and economic theory, it is generally accepted that the major task assigned to local governments is to provide goods and services within a particular geographic area to residents who are willing to pay for them. If this is accepted as the primary role of local government, then the "benefits received" principle is the appropriate starting point to structure the principles of public finance. Under the so-called "Benefit Model" of local government finance, services provided by a local government should, wherever possible, be paid for on the basis of the benefits received from those services.

Generally, under the Benefit Model, local taxes and user fees are the most common (and usually the most appropriate) revenue sources to pay for most services provided by local government. Local taxes are considered appropriate to finance services which are for the "public good" and characteristically benefit all citizens (e.g. police and fire protection, local streets and sidewalks, street lighting, local parks and green spaces, etc.). User fees are considered appropriate where a clear relationship exists between the fees charged and the benefits received and where the user has a substantial measure of choice and/or control over the extent to which he or she actually consumes or uses the service. For example, user fees are generally considered appropriate to fully or partially recover the costs of sewer and water services, waste disposal, public transit and some recreational services.

The generally accepted principles of public finance for local (municipal) governments in Canada are as follow:

1) ***Economic efficiency***: This basic principle is concerned with the allocation of resources to the production of goods and services where society gets the largest possible bundle of goods and services. Theoretically, economic efficiency is achieved when the user fee or tax per unit of output of the service received equals the extra cost of the last unit consumed (the marginal cost). The tax or fee indicates what consumers are willing to pay for the service and the marginal cost measures the cost of resources used up in producing that service (Bird, 2001; Bird

and Tsiopoulos, 1997, 35-37). In terms of efficiency, marginal cost pricing (user fees) is not appropriate to pay for policing and local streets however, local property taxes are appropriate to relate the cost and benefits of these services.

2) ***Fairness (equity)***: This principle is based on benefits received and is considered to be achieved when those who consume public services pay for the public services they consume. When a good or service is purchased in the private sector, the purchaser (user) pays for it and derives the benefit (the reason for which the purchase was made). The same principle should apply in the provision of public sector services. Fairness based on ability to pay does not fit the Benefit Model in that it suggests that those with greater ability should pay more taxes. The ability-to-pay principle is less relevant for municipal governments than for senior levels of government because their primary responsibility is to deliver services and not to redistribute income. Concerns about the tax burden on low-income individuals should be addressed through income transfers from the Provincial or Federal governments, and through social assistance programs targeted to individuals in need.

3) ***Accountability:*** Taxes (charges) and expenditures should be designed in ways that are clear to taxpayers so that policymakers can be held accountable to the taxpayers for the services they deliver and the costs they incur. The existence of a direct relationship between the beneficiaries of a municipal government service and payment for that service encourages a proportionately high degree of accountability.

4) ***Stability and predictability***: Revenues should be stable and predictable so that municipalities can budget and plan for future expenditures. Property taxes, by their very nature, are reasonably stable and predictable, as are most user fees. Grants in lieu of taxes are seen to be neither stable nor predictable.

5) ***Autonomy***: It is widely recognized that municipal governments should have autonomy and flexibility to set their own priorities as it befits their status as a significant order of government. Providing municipalities with a significant degree of autonomy provides for a clear delineation from the responsibilities of other orders of government and therefore enhances the ability of citizens to hold municipal government directly accountable for the provision of local services.

6) ***Ease of administration***: This basic principle simply means that the time and resources required to administer any particular program, project, or financing tool should be minimized.

3.2 Financing Strategies

3.2.1 Pay-As-You-Go

A Capital Debt Reduction Strategy was announced as part of the City's 2006 budget. This strategy essentially called for the City's expenditures on capital projects to be no greater than the City's reduction of long-term debt principal in that particular year. This strategy effectively "capped" (or limited) the City's future long-term debt level at the amount outstanding at December 31, 2005. The Capital Debt Reduction Strategy was to continue until the 2010 fiscal year, after which the City recommended the adoption of a Pay-As-You-Go policy. Simply stated, capital projects could not proceed unless the City was in a financial position to pay for these capital projects out of current revenues, presumably without placing the City in deficit position on its operations. The long-term effect, at least in theory, of a Pay-As-You-Go policy would be to completely eliminate long-term debt from the City's balance sheet. In the present environment of aging (or decaying) civic infrastructure, often in dire need of upgrades or replacement, the Pay-As-You-Go policy appears to be completely impractical, unless the City is prepared to raise funds for these infrastructure projects through significant current tax increases and/or increased user fees.

The Pay-As-You-Go policy, while no doubt well-intentioned, has a number of practical limitations which make it a virtually unworkable strategy for many of the City's capital asset and infrastructure projects, including:

- Municipal budgets tend to be relatively intensive with respect to operating expenses, making it difficult, if not impossible, to find "room" for major capital assets and infrastructure projects within the budget, unless additional revenues are generated from increased taxes and/or new or increased user fees.
- Legislation in the Province of Prince Edward Island requires that municipalities cannot budget for operating deficits. Unlike provincial and federal government debt which is often incurred to fund operating deficits, municipal borrowing is restricted to financing assets and infrastructure projects with relatively long useful lives – sometimes as long as 20 – 35 years.
- Infrastructure projects such as sewer and water systems, major roadways and large buildings are typically few in number but large in terms of the dollars required for each individual project making it virtually impossible to "time" these projects, or to efficiently spread them out in stages over several years, in such a manner as to be capable of financing on a Pay-As-You-Go basis.
- Federal and provincial programs to assist municipalities in funding large infrastructure projects are offered at the discretion of the funding provider. The timing, duration and eligible funding amounts of these programs are not known with certainty until formally announced, making it difficult for municipal governments operating under a Pay-As-You-Go policy to time the initiation and funding of eligible infrastructure projects.

- A Pay-As-You-Go policy is also inherently unfair with respect to adherence to the basic public finance principle of Fairness (Equity). Many Canadian municipalities appear to subscribe to the principle of "inter-generation equity" when budgeting for and financing capital assets and infrastructure projects. Essentially, this principle supports the notion that each generation which benefits from a particular capital asset or infrastructure project should pay for an equitable (or proportionate) share of the cost based on the benefits derived from that particular asset.

3.2.2 Long-term Financing

For many years, and particularly prior to 2006, the City of Charlottetown has financed much of its acquisition of significant capital assets and infrastructure projects with one of several forms of long-term financing including mortgages, loans, obligations under capital leases, debentures and installment debentures. Generally, the obligations under capital leases are secured by tangible assets, while the mortgages, loans and debentures are unsecured and supported only by a pledge of the City's full faith and good credit, and its unlimited taxing power.

As described previously, the City adopted a Debt Reduction Strategy in its 2006 budget. This strategy was slated to continue until the 2010 fiscal year, at which time the City would adopt a Pay-As-You-Go policy. The Pay-As-You-Go policy proved untenable for a variety of reasons, causing the City to re-consider its strategic direction with respect to its use of long-term debt financing.

At present, municipalities in Canada commonly use some form of long-term debt financing for the acquisition of major capital assets and infrastructure projects. This reality is driven by several factors, including:

- Provincial legislative prohibitions on municipalities incurring operating deficits make it difficult, if not impossible, for most municipalities to find sufficient budget "room" to pay for these major long-term assets on a cash basis, without imposing significant new tax increases or user fees.
- An apparent shared objective of many Canadian municipalities is to avoid increases (or at least frequent increases) in municipal property tax rates, and to a much lesser extent, increases in user fees. Instead, these municipalities prefer to encourage generic revenue growth through new property development, growth in property values and more innovative economic development policies.
- An apparent "buy-in" to the Benefit Model of public finance and its core principle of Fairness (Equity) with respect to spreading the cost burden of capital assets and infrastructure projects equitably over their useful lives, or over some arbitrary but long-term timeframe, reflecting a "beneficiary or user pay" principle. In essence,

this means that municipalities tend to favor a Pay-As-You-Use policy, rather than a Pay-As-You-Go policy.

- Older municipalities in Canada are experiencing the negative impacts of "infrastructure deficits", primarily as a result of aging and decaying infrastructures and as a result of population growth and increased economic activity within the municipality. Not acting responsibly to address these infrastructure deficits can have serious negative consequences for municipalities, including slow or declining population growth, reduced economic development activity and flat or declining real estate values, among others.

3.2.3 Current Viewpoints

A high-level review of recent literature on municipal financing in Canada indicates a greatly renewed interest in long-term debt financing as an integral part of a municipality's strategic approach to addressing its needs with respect to the acquisition of major capital assets and civic infrastructure. Some of this renewed interest in debt financing, at least in the past several years, can be attributed to the low interest rate environment prevailing during that time.

It has also become apparent that a "Pay-As-You-Go" policy to finance major capital assets and infrastructure projects, at least as a "stand-alone" policy, is not a viable option for most Canadian municipalities.

Canada West Foundation (CWF), a leading Canadian group of independent policy and economic experts, observed that after the debt and deficit scares of the 1990's, and the fiscal belt-tightening that followed, long-term borrowing by municipalities diminished. The conventional wisdom moved sharply to a "Pay-As-You-Go" policy which essentially called for all local government expenditures, including capital assets and infrastructure projects, to be made from current revenues. CWF concluded that this conventional wisdom was "excessively conservative" and argued strongly that "the absence of tax-supported debt is not the litmus test for financial responsibility". To the contrary, CWF espoused the view that "fiscal responsibility involves balancing the operating budget over the business cycle and maintaining or increasing financial net worth across the long-term". Essentially, CWF maintains that "using a Pay-As-You-Go" policy to attain a completely debt-free city should never be the ultimate goal of (municipal) fiscal policy, regardless of how well it plays politically, and particularly if the trade-off is a seriously under-funded stock of capital assets and infrastructure.

CWF points to the emergence of the concept of "smart" debt to encourage support for long-term borrowing as a valid and financially responsible form of infrastructure and capital asset financing, recognizing that Pay-As-You-Go simply cannot accommodate the major and often urgent capital asset and infrastructure needs of Canadian municipalities.

The concept of "smart" debt is built around five elements, including:

1) **Appropriate Projects:** The projects best suited to long-term debt financing have long useful lives, are large and expensive, and are often of a one-time or non-recurring nature.
2) **Optimal Debt Levels:** Setting reasonable limits on the amount of debt – not in absolute terms but by limiting total long-term debt in relation to other significant factors such as, the percentage of total revenues, percentage of total tax assessment, or debt service as a percentage of operating expenses and/or revenues.
3) **Amortization:** The "smart" debt concept suggests that municipalities avoid setting arbitrary time limits to amortize long-term loans, or using interest cost as a sole consideration when selecting the appropriate financial instrument and amortization period. Longer loan amortization periods, more in keeping with the useful life of the capital assets or infrastructure being financed, are suggested. CWF point out that longer amortization lowers annual debt service and consequently may allow more necessary borrowing to occur within the optimal debt levels set by the municipality. Longer amortization periods mean paying more interest in total, however a significant portion of that interest is offset by avoiding the costs of future inflation.
4) **Debt Structure and Technique:** Most Canadian municipal borrowing calls for repayment of principal and interest in equal installments over the amortization period. CWF suggests exploring other types of financial instruments (e.g. tax-free municipal bonds, TIF (tax increment financing) bonds, revenue bonds) and creative repayment schedules.
5) **Repayment:** The "smart" debt concept recognizes that borrowing can only be used to finance the infrastructure or capital asset acquired – the repayment of the borrowing itself must be funded from operations. Municipalities could consider concepts such as "earmarked taxation" to fund part or all of a debt issuance, based on the premise that the public will more willingly accept incremental tax increases for projects they value highly.

In a report dated January, 2011 (The Urban Infrastructure Challenge in Canada), Altus Group Economic Consulting (The Altus Group) described Pay-As-You-Go financing for capital assets and infrastructure projects as an "illusion", stating that while local governments may be attracted to these schemes because of an inherent aversion to debt, they do not reduce or eliminate debt; they merely succeed in transferring the debt burden from the public sector to the private (household) sector.

The Altus Group report points out that the proportion of municipal infrastructure financed through development charges to property developers, who ultimately pass these charges on to households, has risen sharply. This tends to exacerbate the growing problem with the average levels of Canadian household debt which the Bank of Canada estimates to

now stand at approximately 150% of household income. There appears to be no clear, universal opinion or practice among Canadian municipalities with respect to funding certain municipal infrastructure through development charges which, in effect, is Pay-As-You-Go financing with the burden ultimately being absorbed by the private (household) sector as opposed to the public sector. The City of Charlottetown, like many other Canadian municipalities, has a policy of funding a large portion of the development costs related to various private sector initiatives (e.g. sub-divisions, shopping malls) through the application of development charges to the developer.

Other municipal finance authorities disagree (at least partially) with The Altus Group's stance on development charges. Dr. Enid Slack, in her presentation to ECO Aketo Summit IV, in Lagos, Nigeria (July 2009) observed that development charges were appropriate for growth-related infrastructure costs and new developments or redevelopments. She also pointed out specific advantages of development charges including the fact that development charges: (1) mean new growth pays for itself and is not a burden on existing taxpayers and (2) if levied on a development by development basis, development charges can lead to efficient land use decisions. However, Dr. Slack also acknowledges that development charges: (1) can lead to urban sprawl where municipalities levy a uniform development charge regardless of location and (2) do not access funds at the lowest cost as municipalities usually obtain lower rates than developers.

3.2.4 Best Practices

In recent years, Canadian municipalities have increasingly adopted policies encouraging the use of long-term debt instruments as a means of financing major capital assets and large-scale infrastructure projects. Conversely, these municipalities have moved away from Pay-As-You-Go financing, with the exception of certain private developer infrastructures which are still being financed through development charges.

The Altus Group report identifies three categories of what they deem to be "appropriate debt financing options", including:

Category 1 – Infrastructure with clearly defined beneficiaries/users, such as water utilities. The Altus Group report states that this type of infrastructure should be financed solely by debt and that debt should be financed solely by user fees.

Category 2 – Infrastructure with some defined individual users but also providing benefits to the broader community, such as recreational facilities and public transit. The Altus Group report states that this type of infrastructure should be financed by debt, however, the debt should be serviced by a mix of user fees, general property tax revenues and, in some instances, grants from other orders of government.

Category 3 – Infrastructure which provides broad community benefits such as roadways, sidewalks, fire halls, etc. The Altus Group maintain that this type of infrastructure should

be funded by debt, and the debt should be serviced entirely from general property tax revenues.

The Altus Group report observes that Canadian municipalities have the financial capacity to make greater use of low-cost public sector debt to finance basic and necessary urban infrastructure projects. The cost and availability of debenture funding and an apparent aversion to debt by some elected and non-elected municipal officials are obstacles to some municipalities.

The Standard & Poor's Report Card (2009) also supports the notion that Canadian municipalities have the financial capacity (relatively low debt balances, strong operating performance and high liquidity) to use more debt to finance infrastructure projects.

Best practices around debt financing in Canadian municipalities appear to focus on the question of, "How much debt is appropriate?". Canada West Foundation makes the point that "runaway" debt and a "debt-free" city are both extremes to be avoided, and that a reasonable and sustainable level of debt (the appropriate level) lies somewhere between these two poles.

The "How much debt is appropriate?" question is somewhat subjective in nature. In an attempt to alleviate the burden of carrying too much debt and the equally onerous burden of insufficient infrastructure to support growth and economic prosperity, individual municipalities have developed guidelines and benchmarks relating to their own financial capacity to service debt in a responsible and sustainable manner.

Some of the more common best practices adopted by municipal governments in Canada to control or limit the amount of long-term debt outstanding include reference to the following factors:

- Setting reasonable limits while permitting a sufficient degree of financial flexibility;
- Defining the specific purposes for which debt may be issued;
- Taking a comprehensive approach to measuring affordability and sustainability;
- Being sufficiently broad in scope to allow for flexible financial planning that supports the attainment of Council/management objectives and goals;
- Providing for a mandatory, periodic review of guidelines/policies, in the light of ever-changing financial and economic factors (e.g. interest rates, population growth);
- Allowing sufficient flexibility for the municipality to take advantage of available grant funding from federal and provincial governments and/or to take advantage of the limited availability of low-cost financing;
- Reflecting the attitude and philosophy of Council (and hence the community) towards acceptable debt levels; and

- Reflecting the attitude and philosophy of Council (and hence the community) with respect to adherence to the Benefit Model (user or beneficiary pays) of local governance.

3.2.5 Debt Policy Compliance

Many Canadian municipalities have adopted a combination of specific financial ratios or indicators to provide guidance and limitations in determining acceptable levels of debt outstanding and sustainable levels of debt service on this outstanding debt. The specific ratios or indicators chosen vary among municipalities and are superseded by governing provincial legislation in all Canadian provinces.

DBRS (Dominion Bond Rating Service), recognizing that any analysis of financial metrics may be prone to misplaced precision, limit their matrix of key financial metrics with respect to debt levels and interest costs to a small sample of critical ratios, including:

- Net tax-supported debt per capita;[1]
- Net tax-supported debt as a percentage of taxable assessment; and[1]
- Interest costs as a percentage of operating expenses.

Canadian Municipal Government Industry Financial Metrics

Key Ratio	AAA	AA	A	BBB
Net tax-supported debt per capita[1]	< $500	$500 to $2,500	$2,500 to $4,000	> $4,000
Net tax-supported debt as a percentage of taxable assessment	< 0.5%	0.5% to 2%	2% to 6%	> 6%
Interest costs as a percentage of operating expenses	< 1.5%	1.5% to 9%	9% to 15%	> 15%

Source: DBRS August 2012 Rating Canadian Municipal Governments.

Readers are cautioned that the foregoing financial metrics are applied by DBRS to Canada's larger municipalities (population > 300,000).

By comparison, ***Washington County, Maryland, US*** uses a range of debt outstanding indictors, including:

- Net debt per capita;

[1] Net tax-supported debt excludes debt which is essentially supported by user fees e.g. water and sewer systems.

- Net debt as a percentage of personal income; and
- Net debt as a percentage of property fair market value.

They also employ certain debt service indicators, including:

- Debt service as a percentage of general fund revenues;
- Debt services as a percentage of property tax revenues; and
- Debt service per capita as a percentage of income per capita.

The Regional Municipality of Wood Buffalo, ***Alberta*** employs several ratios to guide Council with respect to tolerable debt and debt service levels, including:

- Actual debt plus committed debt as a percentage of 2 X revenue, which is set below the legal limit imposed by Alberta legislation;
- Debt service (principal and interest payments) as a percentage of revenue;
- Debt per resident (per capita), sometimes referred to as debt burden; and
- Debt service as a percentage of total expenditures.

Service Nova Scotia and Municipal Relations prescribes a relatively comprehensive debt management policy framework for Nova Scotia municipal governments, originally developed in 2000 by the Government Finance Officers Association and later revised and approved in 2004 by the Financial Management Capacity Building Committee (FMCBC). Essentially, the FMCBC recommends that prior to requesting financing from the Nova Scotia Municipal Finance Corporation (a Crown Corporation providing financing to Nova Scotia municipalities, regional school boards and hospitals) a municipality should carry out an analysis of its debt carrying capacity. Furthermore, it is recommended that municipalities routinely carry out a comprehensive analysis of debt capacity to provide assurance that debt acquired by the municipality is affordable and cost effective.

The factors suggested by FMCBC for consideration in analyzing a municipality's debt capacity are as follow:

- **Legislative Limits**
  Statutory limits affecting the amount of debt that can be issued.

- **Measures of Tax and Revenue Base**
  Analyze economic variables such as property tax assessment, changes in assessment, average household income, tax burden as a percentage of household income and residential tax burden as a percentage of household income.

- **Population Trends**
  Consider changes in population, age profile, population density, net migration gain and loss and population mobility.

- **Utilization Trends for Services Underlying Revenues**
  Consider the amount and sustainability of non-tax and user fee sources of revenue.

- **Factors Affecting Tax Collections**
  Consider types of properties and collection risk.

- **Evaluation of Trends in the Municipality's Financial Performance**
  Trend analysis with respect to revenues and expenditures, budget accuracy and variance analysis, and variations in fund balances.

- **Debt Service Obligations**
  Consider existing and potential debt service obligations, ratio of debt service to total revenues, condition of municipality's infrastructure, discretionary or one-time revenue sources to be excluded from debt service ratio, debt service as a percentage of own source revenues.

- **Measure of Debt Burden on the Community**
  Consider debt per capita, comparison of debt per capita to that of municipalities with similar populations.

- **Market Factors Affecting Debt Servicing Costs**
  Consider interest rates, long-term outlook for short and long-term interest rates, inflation rates, and anticipated inflation trends.

Clearly, there is no "one size fits all" set of financial ratios or indicators for municipalities to adopt when establishing policies with respect to debt levels outstanding and debt service requirements. Regardless of the specific ratios or indicators chosen, the municipality's objective must be to establish financial planning guidelines and policies which encourage the judicious use of debt to maintain and improve capital assets and civic infrastructures, in a financially responsible and operationally sustainable manner.

4.0 ANALYSIS OF CITY OF CHARLOTTETOWN DEBT

4.1 Five Year Review

In order to review and determine the appropriateness of the City of Charlottetown's debt position over the previous five years, we must first determine the specific measure of "debt" to be analyzed. There are a number of different categories of debt, including total liabilities, net debt, short-term debt and long-term debt.

4.1.1 Total Liabilities

The City's total liabilities include all amounts owed by the City, including all liabilities of the Water and Sewer Utility. This measure includes all accounts payable, bank loans, accrued liabilities and superannuation fund obligations, as well as long-term debt obligations, and is readily available on the City's consolidated statement of financial position. The City's total liabilities over the five year period ending December 31, 2011, are as follow:

Figure 1

Total Liabilities (in $ millions)				
2007	2008	2009	2010	2011
129.6	130.0	136.9	169.4	145.6

The City's total liabilities appear to have increased by 12% over the five year period. **However, total liabilities in isolation are not an appropriate or accurate indicator of the City's financial position.** Total liabilities only take into account amounts owed by the City, but do not reflect the liquid assets that directly offset these liabilities. For example, if the City were to borrow $1 million and hold the money in its cash account, the total liabilities would increase by $1 million although the funds are immediately available to repay the debt. The most significant example of this anomaly is the superannuation fund. Included in the $145.6 million in total liabilities at December 31, 2011 is $60.1 million in superannuation fund liabilities. This figure does not take into account the City's $53.2 million in superannuation fund assets available to offset the superannuation fund obligations.

A more appropriate measure of the City's debt position, which takes into account the liquid financial assets available to offset the City's obligations, is the concept of "net debt".

4.1.2 Net Debt

Net debt is a measure which nets the value of the City's liabilities with its cash and other similar liquid assets and can be readily determined from the City's consolidated statement of financial position.

As can be seen on the December 31, 2011 consolidated statement of financial position, the City has "financial" assets including cash, accounts receivable, superannuation plan assets and other assets which are considered liquid financial assets and would be more readily available to repay the City's liabilities. Financial assets do not include assets such as land, buildings, equipment and prepaid expenses which are not intended to be converted to cash.

The City's net debt position (i.e its total liabilities less financial assets) over the five year period ending December 31, 2011 is as follows:

Figure 2

Net Debt (in $ millions)				
2007	2008	2009	2010	2011
72.5	76.1	74.4	75.9	74.0

The City's net debt position has remained relatively stable, increasing by only 2% over the entire five year period ended December 31, 2011.

In the context of this review of the City's debt position, however, the primary focus is on the long-term debt the City has incurred to finance capital projects. Net debt is not a perfect measure of this because of the fact that it takes into account certain significant liabilities which are not related to the financing of capital projects. Thus, a more relevant measure of the City's debt in the context of capital asset financing is long-term debt.

4.1.3 Long-term Debt

Under the Charlottetown Area Municipalities Act, the City can not budget for an operating deficit. The City has been successful in maintaining its operations in a surplus position and therefore has not borrowed long-term funds to finance its operations. As a result, the City's long-term debt is associated exclusively with the financing of capital projects. The City's long-term debt for the five year period ended December 31, 2011, as presented on the consolidated statement of financial position, is as follows:

Figure 3

Long-term Debt (in $ millions)				
2007	2008	2009	2010	2011
47.7	42.4	37.7	54.0	69.6

It appears that long-term debt has increased by 46% from 2007 to 2011. However, this does not take into account the amount of short-term debt taken on to bridge finance long-term projects and intended to be converted to long-term debt on completion of the project.

When the City undertakes capital projects, it will often initially bridge finance some or all of the project with short-term debt (i.e. bank loans and advances). When the final cost of the project is known and the project is complete, the City will then put long-term financing in place and repay this bridge financing.

While the amount of short-term debt considered to be bridge financing for capital projects is not segregated in the City's consolidated statement of financial position, Scott Ryan, FCMA, the City's Manager of Finance, internally tracks the short-term debt associated with capital projects that are to be refinanced with long-term debt. The short-term debt (bridge financing) outstanding in relation to capital projects, which would subsequently be converted to long-term debt, for the five year period 2007 - 2011 is as follows:

Figure 4

Short-term Debt (in $ millions)				
2007	2008	2009	2010	2011
22.5	30.0	30.6	8.5	7.4

Combining the long-term debt with the short-term bridge financing debt presents a much clearer picture of the actual long-term debt associated with capital projects.

Figure 5

Long-term Debt re: Capital Projects (in $ millions)				
2007	2008	2009	2010	2011
70.2	72.4	68.3	62.5	77.0

Combining long-term debt with short-term bridge financing for capital projects on an annual basis indicates that the total increase in long-term debt associated with capital projects is 9.7% over the five year period ending December 31, 2011, with the majority of that increase occurring in 2011, a year in which $8.5 million was borrowed to finance

the prior year City and Utility capital program through the Canada Mortgage and Housing Corporation.

4.1.4 Long-term Debt Schedule

A review of the composition of the City's long-term debt obligations at December 31, 2011, indicates the interest rates in effect on the City's current debt obligations range from a low of 2.75% to a high of 10.25%, with a weighted average interest rate of 4.39%. These loans mature at various times between 2012 and 2031.

The required annual payments of both interest and principal (debt service costs) for the December 31, 2012 to December 31, 2016 period, as outlined in the Notes to the City's consolidated financial statements, total $37.8 million, comprised as follows:

Figure 6

Debt Service Costs per Financial Statements (in $ millions)	2012	2013	2014	2015	2016
Principal	8.9	3.2	3.2	3.1	2.9
Interest	3.9	3.4	3.2	3.1	2.9
Total	12.8	6.6	6.4	6.2	5.8

It should be noted that the debt service amounts indicated above have two limitations for analytical purposes. First, in any particular year, the debt service amount does not include the debt service which will be associated with the short-term bridge financing related to capital projects and intended to be converted to long-term debt.

The short-term debt of $7.4 million that had been incurred on long-term capital projects was refinanced during 2012 with long-term debt. This debt now caries an interest rate of 2.9%, amortized over a twenty year term. Using this rate and term, the debt service costs related to this additional debt are as follow:

Figure 7

Debt Service Costs - Short-term Debt (in $ millions)	2012	2013	2014	2015	2016
Principal	.3	.3	.3	.3	.3
Interest	.2	.2	.2	.2	.2
Total	.5	.5	.5	.5	.5

Second, the debt service indicated on the City's consolidated financial statements includes the full repayment of loans that mature during the period, without allowing for a refinancing of said loans. Taking into consideration that certain loans maturing during this period are intended to be renewed with similar terms, the debt service costs for the next five years are expected to be as follows:

Figure 8

Projected Debt Service Costs (in $ millions)	2012	2013	2014	2015	2016
Principal	4.6	4.7	4.8	4.8	4.6
Interest	3.6	3.2	3.0	2.8	2.6
Total	8.2	7.9	7.8	7.6	7.2

4.2 Projected Capital Works

4.2.1 Five Year Capital Plan Costs

The City currently has a five year capital plan which is used as the basis for its annual capital budget. While the timing of certain expenditures may change due to reprioritization, this capital plan offers the best indicator of the City's financing requirements over the short to medium (1 – 5 years) term.

The attached Appendix B details the City's current five year capital plan. The projected capital costs are summarized below:

Figure 9

Capital Plan Costs – Total Cost (in $ millions)				
2012	2013	2014	2015	2016
15.0	14.9	11.4	11.3	15.9

The amounts shown in the City's capital plan are the estimated full costs of all projects involved, and do not include offsetting funding which may be received from various levels of government. The City obtains funding from the Federal government through the Federal Gas Tax Fund which is earmarked for capital projects. In the past, the City has received Federal and Provincial contributions to capital projects through the Building Canada Fund. While the funds available through the Building Canada Fund have been depleted, it is widely expected that new funding under similar terms and conditions will become available in 2014. In the past, the City has also received funding from the Provincial government on a project by project basis. Because this funding is not committed or known at this time, the City is unable to budget for it.

For 2012 and beyond, the Federal Gas Tax funding amount is projected to be $3.1 million. The City also expects a $1.9 million contribution from the Provincial government for the Spring Park Separation project, which is included in the 2012 capital budget. Reducing the projected capital budget for these expected Provincial and Federal government contributions, the net cost of these capital projects is projected to be as follows:

Figure 10

Capital Plan Costs – City Portion (in $ millions)	2012	2013	2014	2015	2016
Capital Budget	15.0	14.9	11.4	11.3	15.9
Less: Building Canada	0.0	0.0	0.0	0.0	0.0
Less: Gas Tax Fund	3.1	3.1	3.1	3.1	3.1
Less: Provincial funding	1.9	0.0	0.0	0.0	0.0
Total City portion	10.0	11.8	8.3	8.2	12.8

In the 2006 budget address, the City announced a Capital Debt Reduction Strategy (CDRS). The CDRS was intended to ensure that the City's total long-term debt would not increase by limiting the capital expenditures each year to the amount of long-term debt being retired. This strategy was to take place from 2006 until 2009. Commencing in 2010, it was recommended that the City adopt a Pay-As-You-Go policy, under which capital expenditures would be paid for from operating revenues. Both the City and Utility were to be covered by the CDRS, although water and sewer extensions and new water source exploration were to be exempted from the CDRS.

If the City were to adhere to a Pay-As-You-Go approach for the 2012 to 2016 fiscal years, as recommended in the CDRS, it could require $8-$12 million per year in funding out of the operating budget in order to meet the proposed capital budget. This represents 16-24% of the City's 2011 revenues excluding the Federal Gas Tax funding. Given the City's budgeted operating expenditures, this level of capital asset funding would simply not be possible. A Pay-As-You-Go approach would either require a decreased capital budget, or significantly increased taxes.

If the City were to attempt to reinstate the CDRS strategy that was in place from 2006 to 2009, (i.e. borrowing up to the amount of principal loan repayments during the year), the funding requirements would be as follows:

Figure 11

Capital Plan Costs – City Portion with Re-Borrowing (in $ millions)	2012	2013	2014	2015	2016
Capital Budget	15.0	14.9	11.4	11.3	15.9
Less: Building Canada	0.0	0.0	0.0	0.0	0.0
Less: Gas Tax Fund	3.1	3.1	3.1	3.1	3.1
Less: Provincial Funding	1.9	0.0	0.0	0.0	0.0
Less: Re-Borrowing	4.6	4.7	4.8	4.8	4.6
Total City portion	5.4	7.1	3.5	3.4	8.2

Adhering to this strategy of re-borrowing up to the amount of the annual debt repayments, the City could still require additional funding ranging from $3.4 to $8.2 million, out of its operating budget. This represents between 7% and 16% of the City's

2011 revenues, excluding the Federal Gas Tax funding. Again, this level of funding would not be possible without significant tax increases or decreases to the capital budget.

4.2.2 Special and Significant Projects Summary

Beyond the five year capital plan, there are also a number of special and significant projects which the City either must or would like to undertake. These projects are detailed in Appendix C and summarized below:

Figure 12

Special and Significant Projects (in $ millions)	
Water & Sewer Significant Projects	56.0
City Government	10.5
Public Works	2.8
Water & Sewer Utility	7.5
Parks & Recreation	43.4
Municipal Buildings	2.0

As can be seen, given the large dollar amounts involved, a Pay-As-You-Go strategy, or re-borrowing only to the extent of principal debt reductions, would not provide sufficient funding to cover the cost of these special projects, even with the amounts related to the water and sewer extensions and new water source exploration exempted, as required under the CDRS.

5.0 CAPITAL BUDGETS AND DEBT MANAGEMENT

5.1 Legislative Review

The provincial legislation relevant to this Report includes the following:

- The Charlottetown Area Municipalities Act
- The Water and Sewerage Act

The Charlottetown Area Municipalities Act (the "Act") sets forward the authority of the City to borrow funds for capital purposes. The authority and its limits are defined in section 42, quoted as follows:

> *42. (1) Subject to subsection (2), the council may borrow money by way of loan or the issue of debentures for capital, operating or other expenditures.*
> *(2) Except as may be authorized by the Lieutenant Governor in Council for special projects or in exceptional circumstances, the council may not borrow money for capital expenditures if the result of the borrowing would be to increase the debt of the city to an amount in excess of ten per cent of the current assessed value of real property in the city or such other amount as the Lieutenant Governor in Council may determine.*

The City's assessed value of real property at December 31, 2011 was $2,567,925,380. This places an absolute limit on the City's debt at December 31, 2011 of $256,792,538. The City's actual long-term debt at December 31, 2011 was $69,575,457. As such, the City has significant capacity under the Act to borrow additional funds.

The Act at Section 41 also provides power to the City of Charlottetown to establish Reserve Funds, quoted as follows:

> *41. The council may establish a reserve fund for*
> *(a) expenditures in respect of capital projects including the extension and replacement of existing capital works and expenditures in respect of any land, machinery or equipment necessary for the completion of capital projects; and*
> *(b) the purchase, depreciation and replacement of machinery and equipment used for city purposes.*
> *(c) the repayment of debentures; etc.*

While the Act does not establish a requirement for a Reserve Fund, it does permit the establishment of one.

In Prince Edward Island, the Water and Sewerage Act gives authority and responsibility to the Island Regulatory and Appeals Commission (IRAC) to supervise and control Water and Sewer Utilities in the Province. One of the major powers granted to IRAC is the right to approve capital borrowing and rates for each of the utilities. However, at Section 2, the Water and Sewerage Act specifically notes that this authority does not apply to the City of Charlottetown, quoted as follows:

> *(2) Notwithstanding subsection (1), the Commission does not have general supervision and control over sewerage and water of Charlottetown, City of Summerside or the Towns of Charlottetown South or Charlottetown West and in relation to those utilities this Act shall apply as if for references to the Commission there were substituted references to the relevant municipal council. R.S.P.E.I. 1974, Cap. W-2, s.2; 1991, c.18, s.22; 1994, c.66, s.1 {eff.} March 31/95.*

5.2 Capital Budget Process

At present, the City's informal capital budgeting and decision making process is as follows:

- Capital asset requirements are identified by Committees of Council and departmental managers throughout the fiscal year.
- In the latter part (4th quarter) of the fiscal year, Public Works solicits inputs from Committees of Council and departmental managers on identified capital asset requirements.
- Early in the new fiscal year, departmental managers meet with the Standing Committee to develop a list of potential capital projects, indicating which projects are necessitated by legislation or health and safety concerns, which are in high public demand, which are considered strategic, and which have benefits but are not viewed as being critical.
- The Administrative Services Committee then reviews the entire list of capital projects before advancing the list to the Committee of the Whole of Council for determination as to which projects will be undertaken and the total value of these capital projects for budget purposes.

5.3 Principles Guiding Capital Project Planning and Debt Management

At present, the City does not have a formal debt management policy. However, early in 2012, the City's Chief Financial Officer presented a broad framework of suggested capital planning and debt management principles to the Committee of the Whole of Council, including the following:

Five Year Capital Plan Principles:

- Measure all capital projects for sustainability (including maintaining assets);
- Identify benefits associated with Active Transportation, Disability Lens, Healthy Communities, and ICSP;
- Identify impact on operational budgets;
- Look for opportunities to coordinate with internal and external stakeholders;
- Increase priority when funding from other partners is available;
- Capital plan to be linked to annual budgets;
- Approve capital budget in the last quarter of the fiscal year;
- 5 year capital plan to be updated annually and shared with other departments;
- Committees/Departments to be allowed flexibility in updating forecasts;
- Wherever possible, projects will be planned to coordinate activities from various areas;
- Long-term ROI/benefits/costs to be identified as part of project plan;
- Earmark capital budget to priorities;
- City objectives take priority;
- Capital projects must be for the public good;
- Set aside percent of defined revenue streams as a reserve for capital replacement; and
- Savings from cancelled projects subject to Council allocation using these principles.

Debt Management Principles

- Match term of debt to life of asset to a maximum term of 20 years;
- Do not take on long-term debt for any project with a life of less than 20 years;
- Establish differing repayment terms for short-term assets;
- Stay within 50% of limit allowed by the Charlottetown Area Municipalities Act;
- Debt Servicing not to exceed 12.5% of operating budget;
- Do not borrow for assets of less than $25,000 cost; and
- Establish capital reserve fund.

While there was a good discussion by the Committee of the Whole and the report was positively received, the principles were never brought back to Council with a request for formal adoption.

6.0 CITY OF CHARLOTTETOWN DEBT BENCHMARKS

6.1 Debt Trends – Key Ratios

As discussed earlier, in the context of this review of the City's debt position, we are concerned mainly with the long-term debt that the City has taken on to finance capital projects. Net debt is not a perfect measure of this because of the fact that it takes into account all liabilities, some of which are not related to the financing of capital projects. However, it is the most universally accepted, and therefore, the most readily available measure with which to make comparisons among municipalities.

Relative levels of absolute net debt are often irrelevant when comparing the financial status of municipalities due to differing populations, demographics, etc. As such, meaningful benchmarking with other municipalities is obtained only by measuring net debt or its related debt service cost in relation to certain key factors.

6.1.1 Population

One of the most common measures of a municipality's debt burden is net debt per capita. This measure reflects the value of net debt borne by each citizen of a given municipality.

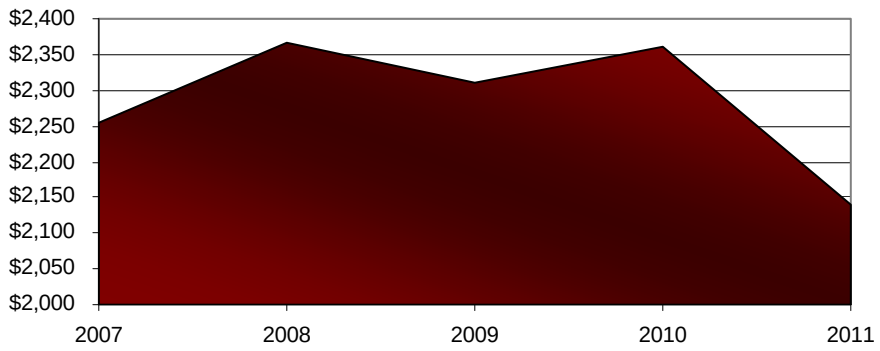
According to the Canada 2006 Census, the population of Charlottetown was 32,174. The 2011 Census shows that the City's population grew by 7.4% to 34,562.

Using this information, we can calculate the net debt per capita for Charlottetown as follows:

Figure 13

Net Debt Per Capita				
2007	2008	2009	2010	2011
$ 2,254	$ 2,366	$2,311	$2,360	$2,140

Figure 13 (a)



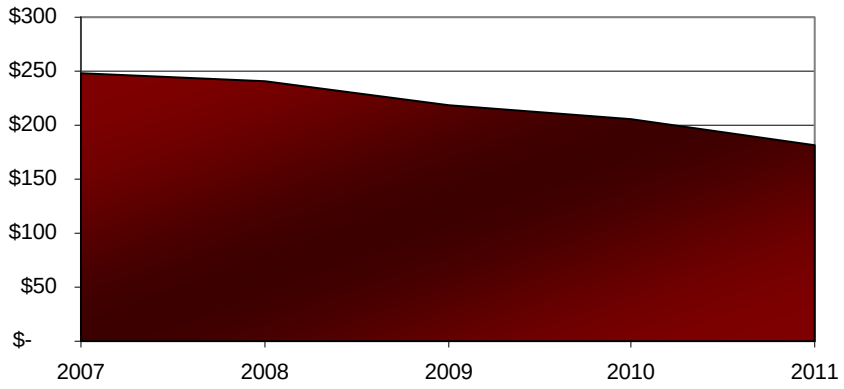
The decline in debt per capita in 2011 is due to the release of the census (i.e. the 2007 to 2010 figures are calculated based on a population of 32,174 and the 2011 figure is calculated using a population of 34,562). If updated population figures were available annually, a smoother trend line would be likely to emerge. The result, however, would not change; net debt per capita has declined by approximately 5% in the five year period ended December 31, 2011. This is despite the fact that, as shown in Figure 2. Section 4.1.2, the City's net debt in absolute terms actually increased by approximately 2% over the same period.

Population growth, coupled with declining interest rates on the City's debt, has led to a decline in the debt service costs per capita of almost 27% over the same period.

Figure 14

Debt Service Cost Per Capita				
2007	2008	2009	2010	2011
$248	$ 240	$219	$ 205	$ 182

Figure 14 (a)



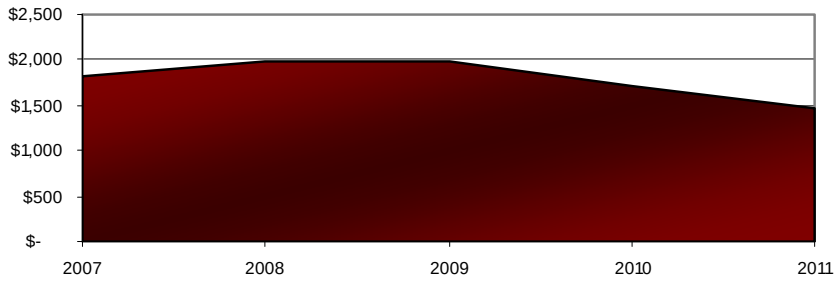
Clearly, while the absolute level of net debt has increased, it has become less expensive to service that debt.

As shown in Figure 15, when rating municipal debt, one of the key ratios DBRS considers is net tax supported debt per capita. For Charlottetown, this figure is obtained by removing the water and sewer utility debt from the net debt, since the utility debt is supported by fees, not property tax.

Figure 15

Tax Supported Debt Per Capita				
2007	2008	2009	2010	2011
$ 1,829	$ 1,995	$ 1,994	$ 1,716	$1,479

Figure 15 (a)



Tax supported debt per capita has declined by approximately 19% over the five year period under review, and falls in the AA rating range of DBRS' metrics (see Section 3.2.5).

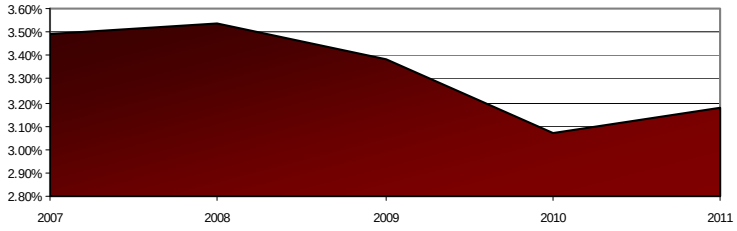
6.1.2 Assessed Value of Properties

Another common metric for measuring a municipality's debt burden is net debt as a percentage of the taxable property assessment. This measure reflects the value of net debt in relation to the assessable property values, which are a municipality's main source of revenue.

Figure 16

Net Debt as a Percentage of Taxable Assessment				
2007	2008	2009	2010	2011
3.49%	3.54%	3.38%	3.07%	3.18%

Figure 16 (a)



Charlottetown's net debt as a percentage of taxable assessment has declined by approximately 9% during the five years ended December 31, 2011, from 3.49% of assessed value to 3.18% of assessed value. During the same period, the net debt in absolute terms increased by approximately 2%, indicating that the City's taxable assessment values are increasing at a faster rate than its net debt.

As shown in Figure 17, when rating municipal debt, another of the key ratios DBRS considers is net tax supported debt as a percentage of taxable assessment. For Charlottetown, this figure is obtained by removing the Charlottetown Water and Sewer Corporation debt from the consolidated net debt. The Charlottetown Water and Sewer Corporation debt is supported by fees, rather than property tax.

Figure 17

Tax Supported Debt as a Percentage of Taxable Assessment				
2007	2008	2009	2010	2011
2.83%	2.98%	2.92%	2.23%	2.19%

Figure 17(a).

Net tax supported debt as a percentage of taxable assessment has declined by approximately 23% over the five year period under review. This percentage has remained in the A rating range of DBRS' metrics.

6.1.3 Revenues/Expenditures

A further measure that is often used when determining the serviceability of a municipality's debt burden is the ratio of its debt service costs to either revenue or expenses. This metric measures the amount of a municipality's revenue committed to servicing debt, or the proportion of its expenditure budget dedicated to servicing debt.

When the City measures debt service as a percentage of revenue or expenses, it measures them based on the budgeted revenues and expenses.

For Charlottetown, these ratios have trended as follows over the five year period ended December 31, 2011:

Figure18

Debt Service as a Percentage of Revenue (Budget)				
2007	2008	2009	2010	2011
17.68%	16.42%	14.65%	12.31%	11.67%

Figure 19

Debt Service as a Percentage of Expenditures (Budget)				
2007	2008	2009	2010	2011
19.72%	18.22%	15.76%	13.03%	12.49%

Debt service as a percentage of budgeted revenue has declined by approximately 34%, meaning less of the City's revenue is required to service the debt. Debt service as a percentage of budgeted expenditures has declined approximately 37%, meaning the debt service costs are a smaller part of annual expenditures.

While the City uses budgeted revenues and expenses when calculating this metric, many other municipalities use actual revenues and expenses. As such, it is valuable to look at how these ratios are trending on both a budgeted and actual basis.

For Charlottetown, these ratios calculated using actual revenues and expenses have followed the following trends over the five year period ended December 31, 2011:

Figure 20

Debt Service as a Percentage of Revenue (Actual)				
2007	2008	2009	2010	2011
17.83%	15.56%	14.53%	12.29%	11.62%

Figure 21

Debt Service as a Percentage of Expenditures (Actual)				
2007	2008	2009	2010	2011
17.85%	14.34%	16.06%	12.95%	11.87%

Debt service as a percentage of actual revenue has declined by approximately 35%, meaning less of the City's revenue is required to service the debt. Debt service as a percentage of actual expenditures has declined approximately 34%, meaning the debt service costs are a smaller part of annual expenditures.

Looking at these two measures in graph form, we see the trend of declining debt service costs as a percentage of both revenue and expenditures. The percentage of budget vs. actual are also trending in lockstep.

Figure 20(a)

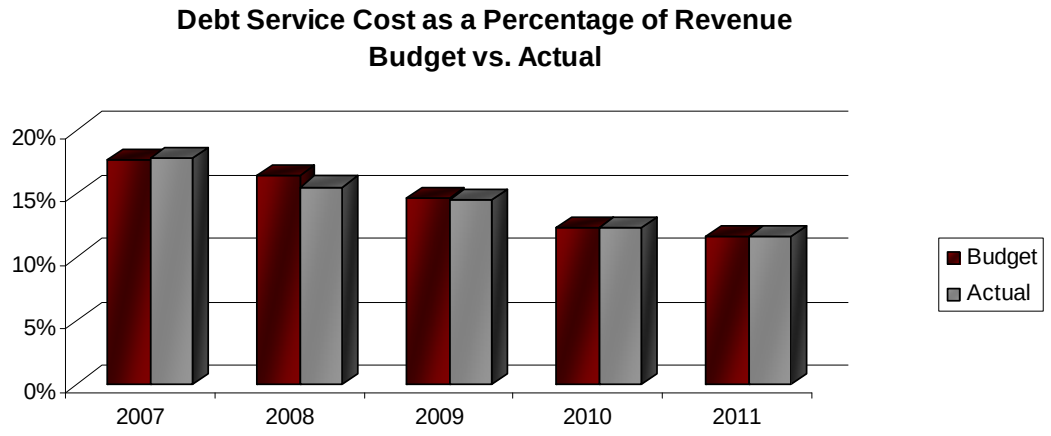
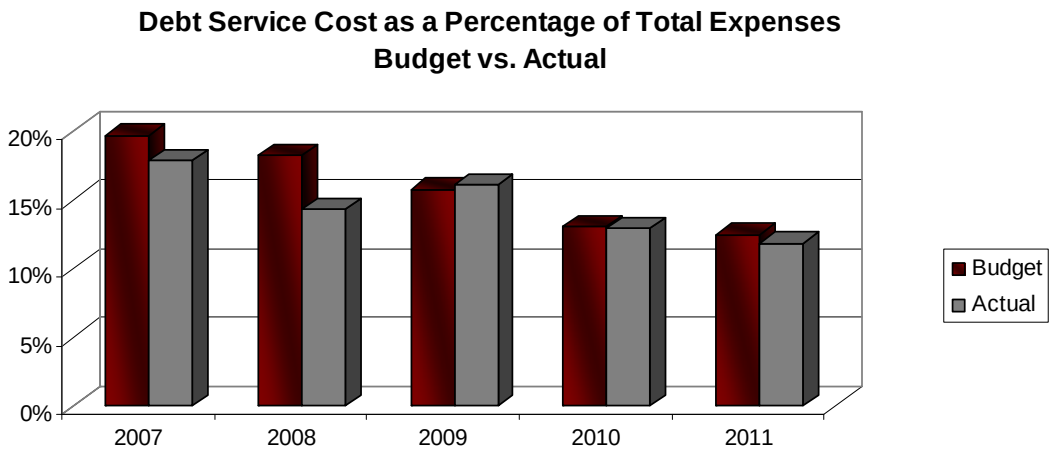


Figure 21(a)



6.2 Comparisons With Other Municipalities

While the ratios in isolation allow for the analysis of the trends for Charlottetown, it is also useful to review the trends in light of the trends in other municipalities.

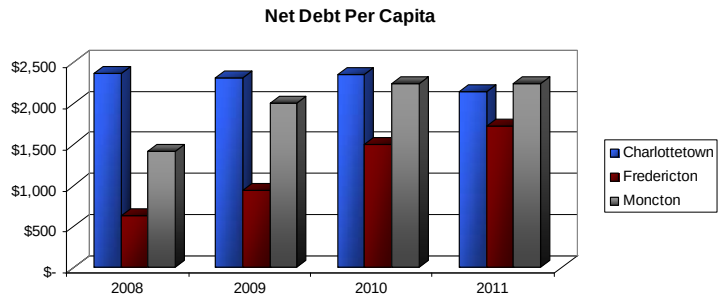
In choosing municipalities for comparison purposes, we reviewed information available on the internet for municipalities in the Atlantic Region which were believed to be comparable. In many circumstances, information is not readily available online. However, two comparable cities were found that have sufficient information available online to prepare meaningful comparisons; Moncton, New Brunswick and Fredericton, New Brunswick.

Moncton has a population of 69,074 per the 2011 Canada Census, while Fredericton has a population of 56,224. While both municipalities are larger than Charlottetown, their proximity and scope of services make them reasonably comparable.

6.2.1 Net Debt Per Capita

Figure 22 shows the net debt per capita in Charlottetown, Fredericton and Moncton. Fredericton and Moncton only provide four years of financial information online, so our review is limited to the four year period ending December 31, 2011.

Figure 22

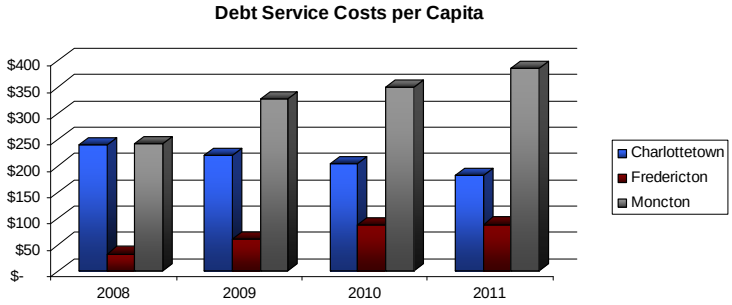


Charlottetown had an absolute level of net debt per resident that was significantly higher than both Fredericton and Moncton in 2008. However, Charlottetown's net debt per capita has trended downward over the period. Both Fredericton and Moncton, on the other hand, have been trending upwards and Moncton's net debt per capita now exceeds Charlottetown's. In all cases, however, these municipalities have net debt per capita that would put them in DBRS' AA rating range.

6.2.2 Debt Service Cost Per Capita

Figure 23 shows the debt service costs per capita for Charlottetown, Fredericton and Moncton for the four year period ended December 31, 2011.

Figure 23

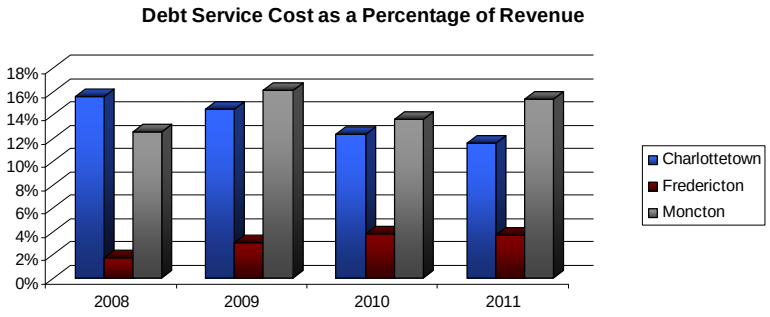


Moncton's debt service costs are significantly higher than Charlottetown and Fredericton due to the fact that Moncton amortizes all of its debt over 10 years, while Charlottetown and Fredericton have amortization periods of up to 20 years. This leads to Moncton repaying a larger portion of its principal every year. However, the trends can be compared. The trends for all three municipalities parallel the trend in net debt per capita, with Fredericton and Moncton increasing while Charlottetown decreases. In all three municipalities, the absolute level of net debt is increasing. However, for Charlottetown, the financial impact of the increase in the net debt is offset by the declining cost of servicing the debt as interest rates decline.

6.2.3 Debt Service Cost as a Percentage of Revenue

Figure 24 shows the debt service costs as a percentage of revenue for Charlottetown, Fredericton and Moncton for the four year period ended December 31, 2011. Because the City of Fredericton does not provide its budgeted figures on the financial statements, actual revenues were used when making these comparisons.

Figure 24

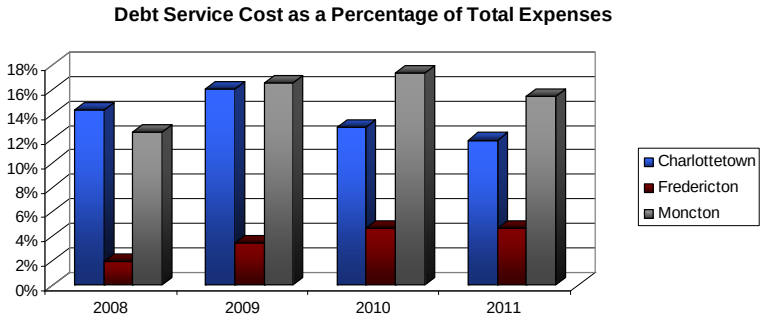


Similar to other measures of debt service, debt service cost as a percentage of revenue has been declining in Charlottetown, but rising in Moncton and Fredericton. As a result, an increasingly greater percentage of Moncton and Fredericton's revenues are dedicated to servicing their debt, while the percentage of revenue declines for Charlottetown, leaving an increasingly greater percentage of revenue available for Charlottetown to devote to operating expenditures.

6.2.4 Debt Service Cost as a Percentage of Total Expenditures

Figure 25 shows the debt service costs as a percentage of total expenses for Charlottetown, Fredericton and Moncton for the four year period ended December 31, 2011. Because the City of Fredericton does not provide its budgeted figures on the financial statements, actual expenses were used when making these comparisons.

Figure 25



Similar to other measures of debt service, debt service cost as a percentage of total expenses has been declining in Charlottetown, but rising in Moncton and Fredericton. As a result, a greater percentage of Moncton and Fredericton's budgeted expenditures are dedicated to servicing their debt, while the corresponding percentage declines for Charlottetown.

7.0 DEBT MANAGEMENT CONSIDERATIONS

7.1 Interest Rates

Chartered Bank prime business loan rates in Canada have been at or near all-time low levels over the past five years (February 2009 – February 2013), in a range between 2.25% and 3.0% throughout this period. In fact, the prime business loan rate has been constant at 3% over the past thirty months (see Appendix D). During this period, Canada has also experienced a mild recession with relatively low inflation rates.

Most Canadian Chartered Bank forecasts are indicating interest rate stability throughout the remainder of 2013, with a likelihood of moderate increases during 2014. RBC Economics is forecasting a 100 basis point increase to the Bank of Canada's overnight borrowing rate during 2014, moving from 1.0% to 2.0% in increments of 25 basis points throughout the year. With the Bank of Canada overnight rate at 2.0%, the Chartered Bank prime business loan rate will likely increase from its current 3% level to approximately 4.0% by the end of 2014 (see Appendix E).

Municipalities considering financing capital projects with long-term debt would be well-advised to carefully consider the timing for initiating such projects. Presuming the capital project being considered is both necessary and cost efficient, serious consideration should be given to initiating these projects in 2013 (if possible) or 2014 to take advantage of prevailing low rates and the consequent positive impact on future debt service requirements.

7.2 Off-setting Future Inflation Costs

The interest cost associated with long-term debt is often viewed in absolute terms as just another expense item among many in the municipal operating budget. However, it is important to bear in mind the fact that a significant portion of this interest expense (perhaps one-half or more in this low-interest rate environment) is offset by avoiding the costs of future inflation. For example, if the long-term interest rate is 3.5% annually and inflation is running at 2.0% annually, the "real" interest cost is 1.5%, in that the municipality will have avoided the annual inflationary cost increase of the capital project, had the project been deferred.

7.3 Financial Capacity

Municipalities generally examine a range of economic factors and financial indicators when considering whether it has the capacity to take on additional debt and, if so, how much debt can be safely tolerated. The economic factors and financial indicators (all of which are mentioned in Section 5.3) considered when gauging a municipality's financial

capacity with respect to incurring additional long-term debt generally include the following:

- Legislative limits;
- Taxable assessment and non-tax revenue base trends;
- Interest rates and interest rate outlook;
- Population and economic growth trends;
- Existing infrastructure deficiencies;
- Priority (urgency) assigned to specific capital projects;
- Debt service as a proportion of budgeted revenue/expense;
- Debt composition (tax supported or own-source revenue supported); and
- Capitalization and amortization accounting policies.

Capital asset acquisition and financing decisions generally entail a complex blend of factors, including urgency of requirement, priority in relation to other planned expenditures, interest rates, existing debt and debt service levels, economic outlook, economic growth patterns, and population and demographic trends. As such, these major financial decisions often cannot be adequately addressed within a "one-size-fits-all" set of debt management policies and limitations.

7.4 Limits vs. Guidelines

Some municipalities have adopted rigid limitations with respect to key debt management indicators such as debt service as a percentage of budgeted expenses, long-term debt as a percentage of taxable assessment, long-term debt per capita, etc. There is some merit in prescribing certain key limitations as a method of enforced debt management. However, rigid debt management policies, if rigidly enforced, can lead to missed opportunities (e.g. availability of significant capital grants, low interest rates) and, as a consequence, poor financial planning. As has been pointed out previously in this report, increasing infrastructure deficits, driven by a refusal to take on additional long-term debt, can have serious negative impacts on property values, economic performance and population growth within a municipal region.

While there is no doubt that strong and prudent debt management is expected by taxpayers, this objective can, in our view, be better-served by constructing acceptable, written guidelines and principles, and adhering to them in the normal course of business, but always retaining the right to act outside these guidelines when a strong business case can be made for doing so.

8.0 CONCLUSIONS

8.1 Financial Management

In our view, the City's level of net debt outstanding at December 31, 2011 is appropriate in relation to the City's assets and its ability to service debt. We note that while the City's net debt has increased marginally (by 2%) in total over the past five years, debt service as a percentage of budgeted revenues and budgeted expenditures has decreased over the same period. Debt service on a per capita basis has also decreased over the past five years. We also note that net debt as a percentage of taxable assessment and tax-support debt as a percentage of taxable assessment have both decreased significantly over the past five years.

8.2 Financing Capital Assets

In our view, the Capital Debt Reduction Strategy (the "CDRS") which the City intended to employ during the 2006 – 2009 fiscal period, although no doubt well-intentioned, was neither viable nor sustainable. The CDRS was intended to be replaced with a Pay-As-You-Go capital asset financing strategy in fiscal 2010. The Pay-As-You-Go strategy proved to be virtually unworkable for a number of reasons, set forth in Section 3.2 of this report.

Since 2010, the City appears to have adopted a more open attitude to debt financing. In our view, financing large capital assets/projects with extended useful lives by way of long-term debt financing, amortized approximately in relation to the useful life of the acquired asset, is appropriate and in accordance with the principles of good financial management.

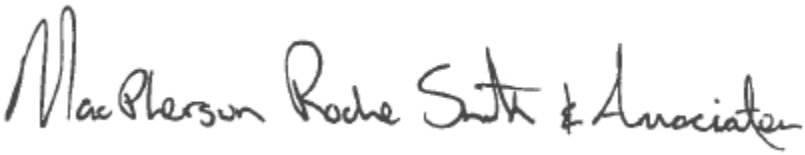
We suggest that the City prepare and adopt a comprehensive set of **guidelines** with respect to both capital asset planning and debt management principles. We note that the City's Chief Financial Officer presented a broad framework of suggested capital planning and debt management principles to the Committee of the Whole of Council early in the 2012 fiscal year. We believe this suggested framework could be a useful foundation for consideration in preparing comprehensive guidelines with respect to capital asset planning and debt management.

8.3 Expected Future Impacts on Debt

In common with most Canadian municipalities, the City of Charlottetown faces a significant infrastructure deficit; particularly in terms of water and sewer infrastructure and, to a lesser extent, City Government infrastructure such as Fire Hall Station replacement, transit bus replacements and parking garage upgrades. As noted in our report, there are significant costs associated with undertaking these capital projects.

However, we also note that there are significant costs associated with not undertaking these necessary projects within a reasonable time frame. These "deferral" costs include negative impacts on economic growth, property values and population growth within the municipality, as well as the costs of inflation with respect to the eventual cost of deferred capital projects. We also note the exceptionally favorable current interest rates, which are expected to continue throughout 2013 but gradually increase during 2014.

Respectfully submitted,



MacPherson Roche Smith & Associates
March 6, 2013

APPENDIX A

Bibliography

Bibliography

Altus Group Economic Consulting, *The Urban Infrastructure Challenge in Canada: Making Greater Use of Municipal Debt Options*, January 2011.

Association of Municipalities of Ontario, *Towards a new Federal Long-Term Infrastructure Plan* (AMO's Submission to Infrastructure Canada, August, 2012).

Beauchamp, T., CA magazine.com, *Municipalities On The Move*, September 2009.

Beauchamp, Tim, *Municipalities on the Move*, CA Magazine, September, 2009.

Bird, Richard M. and Slack, N. Enid, *Urban Public Finance in Canada*, 1993.

Canadian Council of Ministers of the Environment, *Examination of Potential Funding Mechanisms for Municipal Wastewater Effluent (MWWE) Projects in Canada*, February, 2006.

City of Charlottetown, *2012 Budget*, March, 28, 2012.

City of Charlottetown, *Consolidated Financial Statements*, Years Ending December 31, 2007 – 2011.

Cross, Phillip, FP Comment, *Tough Financial Choices Lie Ahead for Canadian Cities*, December 14, 2012.

DBRS, *Methodology for Rating Canadian Municipal Governments*, August 2012.

Douglas, J.R., Government Finance Review, *Measuring Debt Capacity: The Washington County, Maryland Experience*, August 2000.

FMCBC (Nova Scotia), *Recommended Practice, Debt Management Policy*, Approved 2004.

Infrastructure Canada, *Building a Better Canada Together*, June, 2012.

Kitchen, Harry, *Can Cities Fund Their Infrastructure Needs?* Presentation at the Canadian Association of Business Economics Forum in Kingston, Ontario, August 2007.

Kitchen, Harry M. and Slack, Enid, *New Finance Options for Municipal Governments*, Canadian Tax Journal, Vol. 51, No. 6, 2003.

Lipnick, L.H., Rattner Y., Ebrahim, L., *Government Finance Review, The Determinants of Municipal Credit Quality*, December 1999.

MacPherson Roche Smith & Associates, *Provincial/Municipal Fiscal Relationships*, November 20, 2008.

Mintz, Jack, FP Comment, *Time to Rethink Urban Tax Taboo*, December 17, 2012.

National Roundtable on Sustainable Infrastructure, *Infrastructure Financing*, (undated).

Regional Municipality of Wood Buffalo, *Debt and Debt Management Summaries* (2008 – 2012).

Scotiabank, *Global Forecast Update*, Global Economic Research, January 31, 2013.

Slack, N. Enid, *Financing Municipal Services in Canada*, Presentation to Eko Akete Summit IV, July 2008.

Standard & Poor's (S&P), *Report Card, Canadian Municipalities Manage to Stay the Course Despite the Recession*, June 2009.

UN Habitat, *Guide To Municipal Finance*, Nairobi, 2009.

Vander Ploeg, Casey, *Smart Debt vs. Stupid Debt*, Canada West Foundation Blog, December, 2011.

APPENDIX B

City of Charlottetown

Current Five Year Capital Plan

(2012 – 2016)

2012 ANNUAL ESTIMATES - CITY OF CHARLOTTETOWN

Account Name/Department
Capital Project Summary

Prepared by:
Scott Ryan

Budget Item and Primary Code Fiscal Services - 2800	**2011 Original Budget**	**2011 Projected**	**Estimate for 2012**
Parks and Recreation	800,000	647,213	600,000
Urban Beautification	160,000	160,000	75,000
Fire Hall Design	-	-	250,000
Public Property	300,000	4,166	500,000
Municipal Buildings	160,000	160,000	-
Traffic and Pedestrian Signals	-	-	450,000
Street Lighting	140,000	45,538	60,000
Public Works	1,540,000	1,433,506	3,558,000
New Deal For Cities:			
Street Resurfacing	1,800,000	2,099,623	1,900,000
Sidewalk and Curb Construction	300,000	107,464	232,000
Storm Water Management	350,000	388,446	-
Traffic and Pedestrian Signals	650,000	451,418	-
Major Storm Water Infrastructure	1,000,000	1,048,323	-
Total Capital Projects	7,200,000	6,545,696	7,625,000
Less Partners' Funding	(4,100,000)	(4,145,759)	(2,132,000)
Budget Item Totals (Complete only on the final page of each Budget Item).	$3,100,000	$2,399,937	$5,493,000

2012 ANNUAL ESTIMATES - CITY OF CHARLOTTETOWN

Budget Item and Primary Code:
Capital Budget

Account Name/Department:
Water and Sewer Utility

Detailed Breakdown of Budget Item			Notes/Comments
2012 Utility Capital			
Future water reservoir land purchase	450,000		
WWTP ventilation, sludge grinding, scum skimming	245,000		2011 project completion
WWTP digester lid corrosion protection	69,000		2011 project completion
Fox Run water and sewer extensions	1,010,000		
Spring Park combined sewer separation	5,619,832		
		7,393,832	
Provincial contribution to Spring Park combined sewer separation		(1,873,277)	
New Deal contribution to Spring Park combined sewer separation		(1,000,000)	
	TOTAL	4,520,555	

Appendix B-1

YEAR	DEPARTMENT / - PROJECT DESCRIPTION	ESTIMATED COST	
2013	**PARKS AND RECREATION DEPARTMENT**		
	Arenas - Capital Work for CBA (TBD)	$ 80,000	
	Arenas - Simmons Dressing Rooms (2 new)	$ 215,000	
	Arenas - Capital Work for CCCMI (TBD)	$ 80,000	
	Parks - Confederation Landing Irrigation	$ 30,000	
	Parks - Confederation Trail Renovation (Phase Two)	$ 150,000	
	Parks - Frank MacAulay Tennis Court Resurfacing	$ 24,000	
	Parks - Lawnbowling Greens (Twinning)	$ 231,000	
	Parks - Playground equipment/Park Development	$ 150,000	
	Parks - Q.E. Park Rip Rap Project - Phase 1	$ 30,000	
	Parks - West Royalty Pumping Station	$ 100,000	
	Parks - Active Streets and Bike Paths	$ 50,000	
	Parks - Victoria Park Caretakers House Renovations interior	$ 80,000	
	Parks - Victoria Park Caretakers House Renovations exterior	$ 23,500	
	Parks- Victoria Park Maintenance Shed	$ 98,000	
	Parks - irrigation West Royalty soccer field-field 1	$ 20,000	
	Parks-Confederation Landing facelift (phase 2)	$ 35,000	
	Parks - Confed. Landing Light Replacement(phase 3)	$ 67,420	
	Parks - Confed. Trail Lighting (phase 2)	$ 90,000	
	Queen Elliz tennis court/basketball court with flex court	$ 180,000	
	Parks- Trailer Bleachers (2)	$ 130,000	$ 1,863,920
	PUBLIC WORKS DEPARTMENT		
	Intersection Upgrades with Utility Replacements	$3,000,000	
	Street Resurfacing	1,800,000	
	Stormwater Management & Infill	2,000,000	
	New Sidewalk Construction	300,000	
	Traffic Signals & Pedestrian Crossings	650,000	
	Street Light Rehabitalition & New lighting to LED	250,000	8,000,000
	PUBLIC WORKS DEPARTMENT - HEAVY EQUIPMENT		
	Replace 1998 Street Sweeper	220,000	
	Replace 1978 Grader	180,000	400,000
	WATER & SEWER UTILITY		
	Winsloe Rd, Royalty Junction Rd (contingent on Malpeque Rd installation with water supply)	$1,885,935	
	Existing Water Storage Reservoir Rehabilitation	$750,000	
	Water Meter Program	200,000	
	Preliminary Design for 2014 Projects	$106,773	$2,942,708
	FIRE DEPARTMENT		
	Purchase - New 100' Platform Arial Device (Truck)	*1,300,000	
	Purchase - New Rescue Truck	*400,000	$1,700,000
	(* 10, and 10 year respective lease forcasted)		
	TOTAL PROJECTION		**14,906,628**

Appendix B-2

YEAR	DEPARTMENT / - PROJECT DESCRIPTION	ESTIMATED COST	
2014	**PARKS AND RECREATION DEPARTMENT**		
	Arenas - Capital Work for CBA (TBD)	$ 80,000	
	Arenas - Capital Work for Simmons (TBD)	$ 80,000	
	Arenas - Capital Work for CCCMI (TBD)	$ 80,000	
	Parks - Playground Equipment/Park Development	$ 150,000	
	Parks - splash pad - district park	$ 100,000	
	Parks - Wright's Creek Bridge/Pathway	$ 150,500	
	Parks - Development of Dog Park	$ 15,000	
	Parks - QE Beachfront Development	$ 200,000	
	Parks-Confederation Landing facelift (phase 3)	$ 35,000	
	Parks - Confed. Landing Light Replacement(final phase)	$ 67,420	
	Parks - irrigation West Royalty soccer field-field 2	$ 20,000	
	Joe Ghiz Park washrooms	$ 160,000	
	Parks - Confed. Trail Lighting (phase 3)	$ 90,000	
	Parks - Paving Projects	$ 60,000	
	Parks - Victoria Park Caretakers House Renovations exterior	$ 16,500	$ 1,304,420
	PUBLIC WORKS DEPARTMENT		
	Intersection Upgrades with Utility Replacements	$3,000,000	
	Street Resurfacing	1,800,000	
	Stormwater Management & Infill	2,000,000	
	New Sidewalk Construction	300,000	
	Traffic Signals & Pedestrian Crossings	650,000	
	Street Light Rehabitalition & New lighting to LED	250,000	$8,000,000
	PUBLIC WORKS DEPARTMENT - HEAVY EQUIPMENT		
	Replace Sidewalk Plow	95,000	
	Replace 1984 Loader	225,000	
	Contingency / After-Market Components	80,000	400,000
	WATER & SEWER UTILITY		
	Water Replacements - Belvedere Avenue, Mt Edward to Brackley Point Road (High Pressure)	$1,000,000	
	East Royalty Lagoon Upgrading	$450,000	
	Water Meter Program	200,000	
	Preliminary Design for 2015 Projects	$75,327	$1,725,327
	FIRE DFEPARTMENT		
	Purchase - New 1250 gpm Triple Combination Fire Engine (* 10 year lease forcasted)	*650,000	*650,000
	TOTAL PROJECTION		**11,429,747**

Appendix B-3

YEAR	DEPARTMENT / - PROJECT DESCRIPTION	ESTIMATED COST	
2015	**PARKS AND RECREATION DEPARTMENT**		
	Arenas - Capital Work for CBA (TBD)	$ 80,000	
	Arenas - Capital Work for Simmons (TBD)	$ 80,000	
	Arenas - Capital Work for CCCMI (TBD)	$ 80,000	
	Parks - Central Field 1 scoreboard replacement	$ 24,200	
	Parks -Confederation Landing Park facelift (phase 4)	$ 35,000	
	Parks-Confederation Landing facelift (phase 4)	$ 35,000	
	Parks - Confed. Trail Lighting(Phase 4)	$ 90,000	
	Parks - Simmons Pool - New Construction (only in event of de	$ 579,150	
	Memorial Field light replacement including poles	$ 140,000	
	Parks - VP replace lights and underground wiring in the VP old	$ 350,000	
	Parks - Spring Park Field Development	$ 85,000	$ 1,578,350
	PUBLIC WORKS DEPARTMENT		
	Intersection Upgrades with Utility Replacements	$3,000,000	
	Street Resurfacing	1,800,000	
	Stormwater Management & Infill	2,000,000	
	New Sidewalk Construction	300,000	
	Traffic Signals & Pedestrian Crossings	650,000	
	Street Light Rehabitalition & New lighting to LED	250,000	$ 8,000,000
	PUBLIC WORKS DEPARTMENT - HEAVY EQUIPMENT		
	Replace 2 Sidewalk Plows	190,000	
	Replace 1986 Industrial Blower attachment	150,000	
	Contingency / After-Market Components	60,000	400,000
	WATER & SEWER UTILITY		
	Water Replacements - Parkview Drive, Elizabeth St, High St, Dennis Cres, MacIntyre Dr (High Pressure)	$1,004,000	
	Water Meter Program	200,000	
	Preliminary Design for 2016 Projects	$72,100	$1,276,100
	TOTAL PROJECTION		**11,254,450**

Appendix B-4

YEAR	DEPARTMENT / - PROJECT DESCRIPTION	ESTIMATED COST	
2016 +	**PARKS AND RECREATION DEPARTMENT**		
	Central Field 1 light replacement including poles	$ 140,000	
	renovating waterfront boardwalk	$ 250,000	
	Parks - Confed. Trail Lighting (final phase)	$ 90,000	
	East Royalty Landfill Site Restoration	$ 3,400,000	$ 3,880,000
	PUBLIC WORKS DEPARTMENT		
	Intersection Upgrades with Utility Replacements	$3,000,000	
	Street Resurfacing	1,800,000	
	Stormwater Management & Infill	2,000,000	
	New Sidewalk Construction	300,000	
	Traffic Signals & Pedestrian Crossings	650,000	
	Street Light Rehabitalition & New Lighting to LED	250,000	8,000,000
	PUBLIC WORKS DEPARTMENT - HEAVY EQUIPMENT		
	Replace Aged Equipment	150,000	
	Replace Aged Equipment	150,000	
	Replace Aged Equipment	100,000	400,000
	WATER & SEWER UTILITY		
	Water Replacements - MacKay Dr, Christie Dr, Vic Campbell Blvd (High Pressure)	$1,030,000	
	Water Replacements - Palmers Lane (High Pressure)	$700,000	
	Water Replacements - Mt Edward Road from Belvedere to Palmers Lane (High Pressure)	$650,000	
	Water Replacements - St Peters Road from Belvedere to Palmers Lane (High Pressure)	$1,010,000	
	Preliminary Design for 2017 Projects	$72,100	
	Water Meter Program	200,000	$3,662,100
	TOTAL PROJECTION		**15,942,100**

APPENDIX C

City of Charlottetown

Special and Significant Projects

APPENDIX C

YEAR	DEPARTMENT / - PROJECT DESCRIPTION	ESTIMATED COST	
SPECIAL WITH FUNDING			
	WATER & SEWER UTILITY - SIGNIFICANT PROJECTS		
	Future Water Supply Develoment	$20,000,000	
	Spring Park Combined Sewer Separation - **(Likely a 4 year project with street rehabilitation) ***	$24,000,000	
	*Include Brighton Station Forcemain Replacement		
	*Include Replacement of Fitzroy Sewer Lift Station		
	Regional Water or Sewer Utility	$12,000,000	56,000,000
	CITY GOVERNMENT		
	New Fire Hall Station and Land	6,500,000	
	Parkade Improvements	1,500,000	
	Transit Bus Replacement & Facility Upgrades (500,000/yr)	2,500,000	10,500,000
	PUBLIC WORKS DEPARTMENT		
	Land Assembly - Snow Dump Storage Area (250,000/yr)	1,250,000	
	Stormwater System Maintenance & Video Inspect (300,000/yr	1,500,000	2,750,000
	WATER & SEWER UTILITY		
	Water and Sanitary Replacements & Infill (1,000,000/yr)	$5,000,000	
	Lift Stations/Lagoon/Reservoirs Upgrading (500,000/year)	2,500,000	$7,500,000
	PARKS & RECREATION		
	Parks-Acquisition/Development Experimental Farm Property	**Price TBD**	
	Parks-Acquisition/Development of the Upton Farm Parklands	**Price TBD**	
	Historic Squares-replace paths with historic-looking material	**Price TBD**	
	East Royalty Landfill Site Restoriation	3,400,000	
	Arenas - Eastern Gateway Project and CCCMI Replacement	$ 40,000,000	43,400,000
	MUNICIPAL BUILDINGS		
	Replacement building for Hillsborough Park Comm Centre	1,000,000	
	Replacement building for Sherwood Recreation Hall	1,000,000	2,000,000
	TOTAL SIGNIFICANT PROJECTS COST		$ 122,150,000

APPENDIX D

Administered Interest Rates
(Prime Business)

1935 - 2013

Chartered Bank Administered Interest Rates:
Prime Business
1935-2013

(Percent)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1935	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50
1936	5.50	5.50	5.50	5.50	5.50	5.00	5.00	5.00	5.00	5.00	5.00	5.00
1937	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
1938	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
1939	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
1940	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
1941	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
1942	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
1943	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
1944	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	4.50	4.50
1945	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
1946	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
1947	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
1948	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
1949	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
1950	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
1951	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
1952	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
1953	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
1954	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
1955	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
1956	4.50	4.50	4.50	5.00	5.00	5.00	5.00	5.25	5.25	5.50	5.50	5.50
1957	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.75	5.75	5.75	5.75	5.50
1958	5.50	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25
1959	5.25	5.25	5.50	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75
1960	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75
1961	5.75	5.75	5.75	5.75	5.75	5.50	5.50	5.50	5.50	5.50	5.50	5.50
1962	5.50	5.50	5.50	5.50	5.50	5.50	6.00	6.00	6.00	6.00	5.75	5.75
1963	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75
1964	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75
1965	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	6.00
1966	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
1967	6.00	6.00	6.00	5.75	5.75	5.75	5.75	5.75	5.75	6.00	6.00	6.50
1968	6.50	7.00	7.00	7.00	7.25	7.25	7.00	7.00	6.75	6.75	6.75	6.75
1969	7.00	7.00	7.50	7.50	7.50	8.00	8.50	8.50	8.50	8.50	8.50	8.50
1970	8.50	8.50	8.50	8.50	8.50	8.50	8.00	8.00	8.00	8.00	7.50	7.50
1971	7.00	7.00	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.25	6.00	6.00
1972	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
1973	6.00	6.00	6.00	6.50	7.00	7.75	7.75	8.25	9.00	9.00	9.00	9.50
1974	9.50	9.50	9.50	10.50	11.00	11.00	11.50	11.50	11.50	11.50	11.00	11.00
1975	10.50	9.50	9.00	9.00	9.00	9.00	9.00	9.00	9.75	9.75	9.75	9.75
1976	9.75	9.75	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	9.75	9.25
1977	9.25	8.75	8.75	8.75	8.75	8.25	8.25	8.25	8.25	8.25	8.25	8.25
1978	8.25	8.25	8.75	9.25	9.25	9.25	9.25	9.75	10.25	11.00	11.50	11.50
1979	12.00	12.00	12.00	12.00	12.00	12.00	12.50	12.50	13.00	14.75	15.00	15.00
1980	15.00	15.00	15.75	16.75	13.75	13.25	12.25	12.25	12.25	12.75	13.75	18.25
1981	18.25	18.25	17.75	18.25	19.50	20.00	21.00	22.75	21.25	20.00	17.25	17.25
1982	16.50	16.50	17.00	17.00	17.00	18.25	17.25	16.00	15.00	13.75	13.00	12.50
1983	12.00	11.50	11.50	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
1984	11.00	11.00	11.50	11.50	12.00	12.50	13.50	13.00	13.00	12.50	12.00	11.25
1985	11.00	11.50	11.75	10.75	10.50	10.50	10.50	10.25	10.25	10.00	10.00	10.00
1986	11.00	13.00	12.00	11.25	10.25	10.25	9.75	9.75	9.75	9.75	9.75	9.75
1987	9.25	9.25	8.75	9.25	9.50	9.50	9.50	10.00	10.00	9.75	9.75	9.75
1988	9.75	9.75	9.75	10.25	10.25	10.75	10.75	11.25	11.75	11.75	11.75	12.25
1989	12.25	12.75	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50
1990	13.50	14.25	14.25	14.75	14.75	14.75	14.75	14.25	13.75	13.75	13.25	12.75

Economics and Statistics Branch (Newfoundland & Labrador Statistics Agency) Page 1/2

Chartered Bank Administered Interest Rates:
Prime Business
1935-2013

(Percent)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1991	12.25	11.25	11.25	10.75	9.75	9.75	9.75	9.75	9.50	8.75	8.50	8.00
1992	7.50	7.50	8.25	7.75	7.50	7.00	6.75	6.50	6.25	7.75	9.75	7.25
1993	6.75	6.50	6.00	6.00	6.00	6.00	5.75	5.75	5.75	5.75	5.50	5.50
1994	5.50	5.50	6.25	6.75	6.75	8.00	7.50	7.25	7.00	7.00	7.00	8.00
1995	9.25	9.50	9.75	9.75	9.25	8.75	8.25	8.00	8.00	8.00	7.75	7.50
1996	7.25	7.00	6.75	6.50	6.50	6.50	6.25	5.75	5.75	5.00	4.75	4.75
1997	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	5.25	5.50	6.00
1998	6.00	6.50	6.50	6.50	6.50	6.50	6.50	6.50	7.25	7.00	6.75	6.75
1999	6.75	6.75	6.75	6.50	6.25	6.25	6.25	6.25	6.25	6.25	6.50	6.50
2000	6.50	6.75	7.00	7.00	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
2001	7.25	7.25	6.75	6.50	6.25	6.25	6.00	5.75	5.25	4.50	4.00	4.00
2002	3.75	3.75	3.75	4.00	4.00	4.25	4.50	4.50	4.50	4.50	4.50	4.50
2003	4.50	4.50	4.75	5.00	5.00	5.00	4.75	4.75	4.50	4.50	4.50	4.50
2004	4.25	4.25	4.00	3.75	3.75	3.75	3.75	3.75	4.00	4.25	4.25	4.25
2005	4.25	4.25	4.25	4.25	4.25	4.25	4.25	4.25	4.50	4.75	4.75	5.00
2006	5.25	5.25	5.50	5.75	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
2007	6.00	6.00	6.00	6.00	6.00	6.00	6.25	6.25	6.25	6.25	6.25	6.00
2008	5.75	5.75	5.25	4.75	4.75	4.75	4.75	4.75	4.75	4.00	4.00	3.50
2009	3.00	3.00	2.50	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25
2010	2.25	2.25	2.25	2.25	2.25	2.50	2.75	2.75	3.00	3.00	3.00	3.00
2011	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
2012	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
2013	3.00	3.00										

Note:

The prime business loan rate is the interest rate charged to the most credit-worthy borrowers. When there are differences in the rate charged by individual banks, the most typical rate or rates are taken. Since May 1973 the chartered banks from time to time have had in effect a lower base rate for small business loans under authorization of $200,000 or less. The rate shown in the table applies to large business loans. The rates shown are typical rates on the last Wednesday of the month.

Source: Bank of Canada, Department of Monetary and Financial Analysis

February 12, 2013

APPENDIX E

RBC Economics/Research

Financial Market Forecasts

February 2013

RBC ECONOMICS | RESEARCH

FINANCIAL MARKET FORECASTS

February 2013

Interest rates (%, end of quarter)

	Actual				Forecast								Actual		Forecast	
	12Q1	12Q2	12Q3	12Q4	13Q1	13Q2	13Q3	13Q4	14Q1	14Q2	14Q3	14Q4	2011	2012	2013	2014
Canada																
Overnight	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.25	1.50	1.75	2.00	1.00	1.00	1.00	2.00
Three-month	0.92	0.88	0.90	1.05	1.05	1.05	1.05	1.10	1.25	1.55	1.80	2.10	1.10	1.05	1.10	2.10
Two-year	1.20	1.03	1.15	1.05	1.15	1.25	1.35	1.60	1.80	2.00	2.20	2.35	1.00	1.05	1.60	2.35
Five-year	1.56	1.25	1.35	1.30	1.45	1.60	1.75	1.90	2.10	2.30	2.45	2.60	1.50	1.30	1.90	2.60
10-year	2.11	1.74	1.75	1.75	1.90	2.10	2.25	2.35	2.45	2.65	2.80	3.00	2.30	1.75	2.35	3.00
30-year	2.64	2.33	2.40	2.40	2.45	2.50	2.55	2.60	2.75	2.95	3.10	3.30	3.10	2.40	2.60	3.30
Yield curve (10s-2s)	91	71	60	70	75	85	90	75	65	65	60	65	130	70	75	65
United States																
Fed funds	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Three-month	0.07	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Two-year	0.34	0.25	0.25	0.25	0.25	0.25	0.35	0.45	0.65	0.85	1.00	1.25	0.30	0.25	0.45	1.25
Five-year	1.04	0.70	0.72	0.70	0.85	0.90	1.05	1.20	1.40	1.50	1.75	2.00	1.10	0.70	1.20	2.00
10-year	2.20	1.60	1.65	1.70	1.95	2.10	2.25	2.40	2.55	2.65	2.95	3.25	2.15	1.70	2.40	3.25
30-year	3.32	2.70	2.80	2.90	3.25	3.45	3.60	3.85	3.95	4.00	4.20	4.50	3.20	2.90	3.85	4.50
Yield curve (10s-2s)	186	135	140	145	170	185	190	195	190	180	195	200	185	145	195	200
Yield spreads																
Three-month T-bills	0.85	0.83	0.85	1.00	1.00	1.00	1.00	1.05	1.20	1.50	1.75	2.05	1.05	1.00	1.05	2.05
Two-year	0.86	0.78	0.90	0.80	0.90	1.00	1.00	1.15	1.15	1.15	1.20	1.10	0.70	0.80	1.15	1.10
Five-year	0.52	0.55	0.63	0.60	0.60	0.70	0.70	0.70	0.70	0.80	0.70	0.60	0.40	0.60	0.70	0.60
10-year	-0.09	0.14	0.10	0.05	-0.05	0.00	0.00	-0.05	-0.10	0.00	-0.15	-0.25	0.15	0.05	-0.05	-0.25
30-year	-0.68	-0.37	-0.40	-0.50	-0.80	-0.95	-1.05	-1.25	-1.20	-1.05	-1.10	-1.20	-0.10	-0.50	-1.25	-1.20

Exchange rates (%, end of quarter)

	Actual				Forecast								Actual		Forecast	
	12Q1	12Q2	12Q3	12Q4	13Q1	13Q2	13Q3	13Q4	14Q1	14Q2	14Q3	14Q4	2011	2012	2013	2014
Australian dollar	1.03	1.02	1.04	1.04	1.07	1.09	1.11	1.12	1.11	1.10	1.10	1.09	1.02	1.04	1.12	1.09
Brazilian real	1.83	2.01	2.03	2.05	1.98	1.99	2.00	2.02	2.03	2.04	2.05	2.06	1.86	2.05	2.02	2.06
Canadian dollar	1.00	1.02	0.98	0.99	1.02	1.04	1.05	1.04	1.03	1.02	1.02	1.02	1.02	0.99	1.04	1.02
Renminbi	6.29	6.36	6.29	6.23	6.25	6.20	6.15	6.15	6.12	6.10	6.08	6.06	6.30	6.23	6.15	6.06
Euro	1.33	1.27	1.29	1.32	1.35	1.31	1.27	1.24	1.24	1.24	1.23	1.23	1.30	1.32	1.24	1.23
Yen	83	80	78	87	93	90	85	80	78	77	77	77	77	87	80	77
Mexican peso	12.81	13.36	12.86	12.85	12.75	12.65	12.50	12.25	12.15	12.00	11.85	11.75	13.95	12.85	12.25	11.75
New Zealand dollar	0.82	0.80	0.83	0.83	0.85	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.78	0.83	0.86	0.86
Swiss franc	0.90	0.95	0.94	0.92	0.92	0.95	0.98	1.02	1.02	1.02	1.04	1.04	0.94	0.92	1.02	1.04
U.K. pound sterling	1.60	1.57	1.62	1.62	1.63	1.62	1.61	1.59	1.61	1.63	1.64	1.64	1.55	1.62	1.59	1.64