

The City of Calgary



Finance 2002 February

Table of Contents

Diagra	ams, Charts and Tables	2
	ıtive [´] Summary	
	uction	
1.1	Capital Finance Reports	12
1.2	Tax-Supported Capital is Separate from Self-Supported Capital	13
1.3	Where Capital Financing Comes From	13
1.4	Evolution of Capital Financing Policy	15
Histori	ical Trends	17
2.1	Total City Capital	
2.2	Tax-Supported Capital	
Curre	nt Tax-Supported Capital Financing Policies	25
3.1	Capital Budget	
3.2	Debt	
3.3	Major Projects Reserve	28
3.4	Capital Financing Envelope	28
3.5	Financial Ratios to Evaluate Long-Term Debt	28
3.6	Pay-As-You-Go Contributions from Operations	
Recor	mmended Changes to Capital Financing Policies	31
4.1	Financial Ratios	
4.2	Continuous Decline in Debt	
4.3	Debt Term	39
4.4	Use of Structured Debt	40
4.5	Elimination of Capital Deferrals	40
Poten	tial Additional Capital Financing	
5.1	Increasing Financing from Existing Sources	
Ut	ilizing Existing Debt Capacity	42
	otaining More Funding from Other Orders of Government	
5.2	Obtaining Financing from New Sources	47
Re	eserves and Liabilities	47
Po	otential Transportation-Specific Sources	48
Concl	usions	54
Attach	nments	57

Diagrams, Charts and Tables

Diagram 1 – Lax-Supported Capital Infrastructure Financing14
Chart 1 – Five-Year Capital Budgets17
Chart 2 – Debt Outstanding18
Chart 3 – Tax-Supported Capital Budget Appropriation and Expenditure20
Chart 4a - Tax-Supported Capital Financing: Internal Sources21
Chart 4b - Tax-Supported Capital Financing: External Sources21
Chart 5 – Tax-Supported Outstanding Capital Debt22
Chart 6 – Tax-Supported Net Debt Charges23
Table 1 – Financial Ratios: 1991 – 2000 Tax Supported24
Table 2 – Provincial Government-Regulated Debt and Debt Service Limits32
Table 3 – Tax Supported: Debt Servicing Ratio Alternatives 1991 - 200135
Table 4 – Maximum Tax-Supported Borrowing Capacity (Debt Servicing Ratio Not
Exceeding 10%, 20-Year Regular Amortization, Interest Rate @ 6.25%)37
Table 5 - Tax-Supported Borrowing Capacity Not Requiring Additional Tax Increase
(Debt Servicing Ratio Not Exceeding 10%, 20-Year Regular Amortization,
Interest Rate @ 6.25%)46

Executive Summary

Chapter 1 Introduction

This report has been prepared to:

- Document information and policies on capital financing, thus serving as a summary and reference.
- Recommend changes to policies where appropriate.
- Analyze debt financing capacity under the new policies and identify other possible sources of capital financing.

The City of Calgary tax-supported capital financing policy has evolved gradually over a number of years to meet specific situations as they arose. Calgary's rapid growth in the late 1970s and early 1980s required a great deal of capital infrastructure, resulting in significant borrowing that took tax-supported debt to \$1.04 billion. Subsequently, debt reduction became a priority, but the city began another growth spurt in the 1990s. With the cumulative effect of all the changes since 1985, it is now timely to review and, where necessary, recommend revisions to the policy in order to update and maintain the effectiveness of capital infrastructure investment.

The City has reviewed and reported on capital financing from time to time, and annually provides related information in the budget and in the Financial and Economic Review. Debt has been the primary focus of policy, but growing infrastructure requirements and decreasing debt charges have led to additional policies being created to ensure the infrastructure could be provided when necessary. The policies adopted by Council have significantly reduced the tax-supported debt and increased operating (pay-as-you-go) contributions to capital financing.

 The City has both self-supported and tax-supported business units. This report focuses on tax-supported capital financing and funding policies.

- The City portion of capital funding increased gradually over the years as revenues increased, while contributions from outside sources have been more variable. City debt service expenditures have been decreasing while pay-as-you-go contributions to capital have increased.
- Council adopted policies to deal with new infrastructure requirements; however, The
 City still required more funds than were available in the short to medium term.
 Significant additional funding was obtained from the Provincial Government through
 revenue sharing, additional developer contributions through the Urban Development
 Institute (UDI), and the Calgary Parking Authority, although these may be reduced
 for 2002 and beyond.

Chapter 2 Historical Trends

The report presents historical trends related to:

- Self-supported and tax-supported 5-year capital budgets
- Self-supported and tax-supported debt outstanding
- Tax-supported actual capital expenditures compared to appropriations
- Tax-supported capital financing contributions by source
- Tax-supported debt outstanding
- Tax-supported debt service expenditures
- Financial ratios that The City uses to evaluate long-term debt.

Chapter 3 Current Tax-Supported Capital Financing Policies

 Capital financing policies have largely focused on debt because it was the largest source of financing as well as a significant risk factor for municipalities.

- Current tax-supported capital financing policies are an accumulation of policies that
 were developed and approved to deal with specific capital financing circumstances
 and requirements faced by The City. The report includes both a summary of the
 policies and the complete recommendations adopted by Council.
- The policies include those related to:
 - Capital Budget
 - Debt
 - Major Projects Reserve
 - Capital Financing Envelope
 - Financial Ratios
 - Pay-As-You-Go Contributions From Operations.

Chapter 4 Recommended Changes to Capital Financing Policies

In the past 15 years, The City has achieved significant tax-supported debt reduction. In recent years, significant parts of its transportation and other infrastructure have reached capacity, or major maintenance is required because of age and use. The City has used many options to obtain additional capital financing to meet the growth-related infrastructure requirements. However, financing under existing policies is not adequate to meet immediate requirements.

The Administration believes it is important to reconsider some of the current City capital financing policies. This policy review is particularly timely given the current requirement for additional capital financing.

4.1 Financial Ratios

There are two sets of financial ratios that are important to The City. ratios which have mandated limits set by Provincial Government legislation, and ratios that The City uses

to prudently manage its finances.

- The Provincial Government ratio limits, defined in Alberta Regulation 375/94, are that Calgary's municipal debt (total of tax supported and self supported) can be no more than twice its revenue, and debt servicing can be no more than 35% of revenue. In 2000, The City of Calgary had total tax supported and self supported debt of \$1.048 billion (38.2% of the Provincial Government limit) and \$214 million total tax supported and self supported debt service (44.5% of the limit).
- From 1974 to 1995, The City's main policy with respect to financial ratios was that the portion of tax-supported expenditures devoted to debt repayment should not exceed 20%.
- In 1995, after a debt reduction process was well established, Council approved a revised policy that set the following reduction targets for the ratio Debt Charges as a % of Operating Expenditures:
 - 1996/2000 no higher than 16.0%
 - 2000/2004 no higher than 13.0%
 - 2004/onward no higher than 10.0%
- The policy was changed as a result of a follow-up report in 1996 that recommended six ratios that were consistent with ratios used by credit rating agencies:
 - Total debt as a percentage of total operating revenue (including utilities);
 [includes school boards]
 - Total debt per capita. [includes school boards]
 - Tax-supported debt service costs (principal and interest) as a percentage of operating revenue (excluding utilities); [includes school boards]
 - Tax-supported debt as a percentage of operating revenue (excluding utilities);
 [includes school boards]
 - Tax-supported debt per capita. [includes school boards]
 - Own-sourced financing as percentage of total capital expenditures.

- Five of the six financial ratios include local school board revenues and/or debt.
 While it is useful to look at these ratios and how they are changing compared to other major Canadian cities (as reported by credit rating agencies), changes to The City of Calgary's financial situation would be better evaluated using ratios affected primarily by City actions.
- The previous ratio (until 1996) that calculated the tax-supported debt service cost as a percentage of tax-supported gross expenditure (net of recoveries) served. The City well for many years. It was also a more conservative ratio than the current one the current 10% limit (including school boards) is equivalent to a 15% limit for the pre-1996 ratio.

A 10% limit on the debt service to gross expenditure ratio (excluding school boards) would represent an advance on the timetable set in FB95-26, which called for a 13% limit from 2000-2004 and a 10% limit beyond 2004.

Recommendation 1

The following ratios are to be used by The City of Calgary to evaluate its debt position:

- a) City tax-supported debt service cost as a percentage of City taxsupported gross expenditure (net of recoveries).
- b) City tax-supported debt per capita.
- c) City total debt per capita (including utilities).

Recommendation 2

The target for the City tax-supported debt service as a percentage of City tax-supported gross expenditure (net of recoveries) is that it not exceed 10%.

Recommendation 3

If City tax-supported debt service as a percentage of City tax-supported gross expenditure (net of recoveries) exceeds 10%, the Administration will prepare a recommended plan for returning it to the 10% level.

4.2 Continuous Decline in Debt

- Tax-supported debt has been reduced to less than half its peak reached in 1985,
 and the debt service to revenue ratio is below the policy maximum of 10%.
- There are major, growth-related capital projects that are required to meet demands now, but The City does not have financing for them.
- The City has significant debt capacity that can be used and serviced without additional taxes while keeping tax-supported debt servicing below the limit of 10% of tax-supported expenditure.
- The City has shown it has the will and ability to service debt that, in 1985, was twice the level allowed by a 10% debt service policy.
- Taking out additional debt higher than the amount retired each year is the only current way to finance additional required infrastructure.

Recommendation 4

The City of Calgary can increase its tax-supported total outstanding debt as long as debt servicing does not exceed 10 % of gross expenditure (net of recoveries).

4.3 Debt Term

A shorter debt term costs less in interest and the debt capacity is regained sooner. However, it is worth considering longer debt terms because:

The standard term allowed by lenders is the life of the asset.

 There is an immediate requirement for more capital infrastructure than can be serviced with current financing, and extending the maximum term will increase capacity if it is required.

Recommendation 5

The maximum debt term is 20 years.

4.4 Use of Structured Debt

While it was necessary to implement the structured debt policy in order to build the capital infrastructure that is required immediately, it would reduce interest costs to use other types of debt such as regular amortized debt whenever practical. This would also provide additional capital funding capacity.

Recommendation 6

Low-cost forms of debt are to be used whenever practical in order to minimize cost and maintain debt capacity.

4.5 Elimination of Capital Deferrals

There are many reasons for delays in capital projects that require deferrals from one year to the next. If deferrals were eliminated, there would be frequent requirements to get permission to transfer funds from one program to another so that projects that were ahead of schedule could continue and funds would not be tied up with delayed projects. There would be no change to the amounts ultimately spent on each project, but there would be a lot more administrative work getting approvals and transferring funds.

Recommendation 7

Capital deferrals are permitted, and the Administration will include the amounts and percentages of deferrals for each of the previous five years in each year's capital budget.

Chapter 5 Potential Additional Capital Financing

There is potential to increase near-term capital financing from both existing and new sources.

5.1 Increasing Financing from Existing Sources

- Utilizing existing debt capacity
 - A simulation (2002-2030) indicated that The City has a tax-supported debt capacity of \$350 million over the next five years, in addition to what is included in the current borrowing plan to 2007. The simulation is based on:
 - The debt service to gross expenditure ratio not exceeding 10%
 - No additional taxes
 - 20-year debt terms
 - Regular amortized debt
 - An average interest rate of 6.25%
 - All Major Project Reserve funds are used to pay debt principal
 - Debt interest payments use all of the 1.7% tax levy plus funds from the
 Operating Initiatives Reserve (the OIR would still have unallocated funds).
- Obtaining more funding from other orders of government

5.2 Obtaining Financing from New Sources

- Reserves and liabilities
- Potential transportation-specific sources.

Chapter 1

Introduction

This report has been prepared to:

- Document information and policies on capital financing, thus serving as a summary and reference.
- Recommend changes to policies where appropriate.
- Analyze debt financing capacity under the new policies and identify other possible sources of capital financing.

The report is divided into the following chapters:

- An introduction to City capital financing, including the sources of financing, how the financing relates to capital infrastructure planning, and the evolution of City capital financing policy.
- Historical trends in City capital, with emphasis on the tax-supported portion.
- A detailed listing of the current policies.
- Recommended changes to the policies.
- Potential ways to increase the level of capital financing, including a simulation based on some of the policy changes that demonstrates City tax-supported debt capacity.

The City of Calgary tax-supported capital financing policy has evolved gradually over a number of years to meet specific situations as they arose.

The high-debt era of the early 1980s provided the infrastructure needed to cope with rapid growth. After the tax-supported debt peaked at \$1.04 billion in 1985, the infrastructure was adequate to meet requirements for a number of years. This allowed The City to institute policies that increased direct operating budget funding for capital projects ("pay-as-you-go") and placed a moratorium on new tax-supported debt. These

policies were also put in place to maintain Calgary's excellent credit rating in case it was ever necessary to borrow on the open market.

Continuing growth absorbed the remaining infrastructure capacity by the 1990s, and the provincial government had significantly reduced capital grants. As a result, The City policy was adjusted to allow limited borrowing for major capital projects such as LRT extensions, major interchanges and recreation centres, with principal to be repaid from funds that became available as old debt was paid off. The total tax-supported debt outstanding was to continue declining, so new debt added each year had to be less than the old debt retired. The City also instituted a 1.7% tax levy in 1998 to help fund debt interest payments on transportation projects.

At the same time, The City negotiated a revenue sharing agreement with the provincial government which provides 5 cents per litre (the Provincial Government has proposed a reduction to 4.25 cents per litre for two years effective 2002 April) of vehicle fuel sold within Calgary, to be used for transportation projects. It also negotiated increased contributions from the development industry and the Calgary Parking Authority for transportation projects.

With the number of changes that have taken place since 1985, it is now timely to review and, where necessary, recommend revisions to The City's capital financing policy in order to update and maintain the effectiveness of capital infrastructure investment.

1.1 Capital Finance Reports

From time to time, The City has reviewed and reported on capital financing, primarily focussing on the debt policy (e.g., the Capital Debt Policy Review in 1985 and the Debt Management Policy in 1991). Capital financing information is provided annually in both the Budget and, since the mid-1980s, in the Financial and Economic Review (section 7 (Capital Programs) and section 8 (Municipal Capital Debt)). The primary concern in

these reviews was debt because outstanding tax-supported debt had grown significantly and was perceived to be a potential threat to City financial flexibility.

Growing infrastructure requirements and decreasing debt charges have led to additional policies being created to facilitate infrastructure financing. The current policies were approved through the reports listed in **Attachment 7**.

1.2 Tax-Supported Capital is Separate from Self-Supported Capital

The City's capital budget covers two types of business units: tax-supported and self-supported. The self-supported business units are guided by their own Council-approved policies (Water and Wastewater policies are included as **Attachment 1**) and do not receive funds from the tax-supported portion of The City's capital budget other than as fees for services.

For annual financial report purposes, some capital expenditures within tax-supported business units are considered to be self supported because levies on the user fees they charge are sufficient to pay the debt principal and interest charges (e.g., golf course and mausoleum capital projects). Although the debt is in The City's name, payment comes from external sources. This is similar to local improvement funding through City debt that is paid for by the property owners who benefit from the improvements.

Because the self-supported business units (primarily utilities) receive all necessary funding from fees charged to their customers, their capital programs do not affect The City's tax-supported capital financing. This subject warrants individual attention and is only dealt with in some summary data in this report.

1.3 Where Capital Financing Comes From

Capital financing comes from a variety of sources, including developers (through donated assets as well as acreage assessments), other levels of government, third

parties (including related autonomous bodies), City funds (including taxes and fees for services), and City borrowing (for its own contributions as well as on behalf of property owners for local improvements).

The diagram below shows the sources of capital infrastructure financing, how the funds are processed by The City, and the major categories of projects that the funds are used for. A more detailed diagram showing the flow of funds is included as **Attachment 2**.

DIAGRAM 1

The City Of Calgary **Tax-supported Capital Infrastructure Financing** (A) Sources of Financing Federal Government City of Calgary Provincial Government Autonomous Bodies Development Industries **Property Owner** 3 rd Parties **Processing and Distributing the Funds** (B) Capital Financing Program (840) • Infrastructure Canada-Alberta Program (ICAP) • Pay-As-You-Go (PAYG) • Transportation Tax Levy Reserve Major Project Reserve (MPR) · Operating Initiatives Reserve Capital Reserves Capital Deposits **Projects by Classification** (C) Major Transportation **ICAP** Other Capital Local Improvement

Two processes providing tax-supported capital infrastructure do not follow the general pattern:

 A category of infrastructure not included above is "donated assets" from developers. The City has no involvement in processing funds for these assets, which are turned over at no cost to The City after they have been constructed.

2. Borrowed funds are a temporary source of financing which are later repaid by The City through debt servicing payments in the operating budget.

Ultimately, most of the funds come directly or indirectly from residents of Calgary.

1.4 Evolution of Capital Financing Policy

After tax-supported debt peaked at \$1.04 billion in 1985, The City gradually put policies in place to reduce the debt and increase the amount of capital funding through pay-as-you-go. The implication was that the amount of outstanding debt each year would continue to be reduced until there would be no tax-supported debt, and that eventually City financing for all tax-supported capital would be funded through pay-as-you-go and reserve contributions. Funds that were freed up when outstanding debt and debt servicing payments declined (debt charge savings) were to be equally split between capital funding and operating budget initiatives.

The rapid growth of the city through the 1990s created new infrastructure requirements. While continuing to increase pay-as-you-go and reduce debt, Council adopted the following policies to deal with the new requirements:

- Only consider debt for large, growth-related projects.
- Deposit 50% of debt charge savings in a Major Project Reserve to make principal repayments on the new debt.
- Initiate a 1.7% tax levy beginning in 1998 to pay for interest on new debt for transportation projects.
- Use structured debt (only interest payments during the first half of the term, followed by principal and interest payments in the latter half to achieve full repayment by the end of the term) so that limited cash flow in the early years could be used to make interest payments until debt charge savings could increase and accumulate enough to make principal repayments.

• Use some of the debt charge savings allocated to operating initiatives to supplement the 1.7% tax levy for tax-supported transportation debt interest payments.

However, The City still required more funds than were available in the short to medium term. Significant additional funding was obtained from the Provincial Government through revenue sharing, based on five cents per litre of vehicle fuel sold in Calgary (the Provincial Government has proposed a reduction to 4.25 cents per litre for two years effective 2002 April), from additional developer contributions through the Urban Development Institute (UDI) and from the Calgary Parking Authority (to be reduced for 2002 and beyond as a result of the economic slowdown).

The immediacy of the infrastructure requirements combined with funding limitations have led to a relatively complex set of policies applying to tax-supported capital project financing. Individual policies deal with limited segments of the tax-supported capital requirements (e.g., Capital Financing Envelope, Major Project Reserve, Operating Initiatives Reserve, Tax Levy Reserve, Infrastructure Canada-Alberta Program).

Chapter 2 Historical Trends

2.1 Total City Capital

The City's total capital budget over the past 10 years (including self supported and tax supported) is depicted in the following chart. Each capital budget includes five years, so the amounts are overlapping (e.g., the 1991 budget covers 1991 to 1995 while the 1992 budget covers 1992 to 1996). Unspent appropriations are carried forward to the next year (e.g., the amount carried forward from 1991 is included in the 1992 budget).

The City of Calgary
Five-Year Capital Budgets
(\$ Millions)

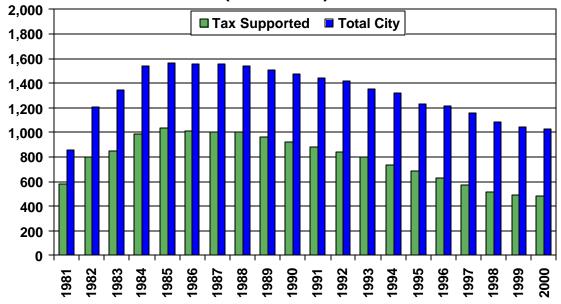
3,500
2,500
2,500
1,500
1,500
1,500
1,500
1,500
1,500
1,500
1,500

Sources: Budget Documents

The steep climb in the 1999 and 2000 5-year capital budgets reflects the increased financing obtained for critical transportation and recreation centre projects that had been deferred. The additional transportation financing came from revenue sharing from the Provincial Government based on vehicle fuel sales, increased contributions from the Calgary Parking Authority and developers through the Urban Development Institute, and a City tax levy to be used for interest on transportation project debt.

The debt chart below highlights the fact that the tax-supported portion went from being more than half of the total in 1991 to being less than half midway through the decade, declining from more than \$800 million in 1991 to \$480 million in 2000.

The City of Calgary
Debt Outstanding
(\$ Millions)



Sources: Budget Documents

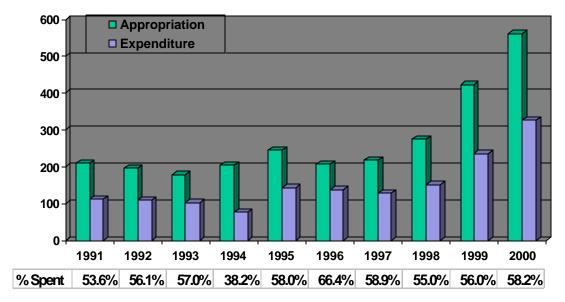
2.2 Tax-Supported Capital

About 60% of the funds approved for the first year of each five-year tax-supported capital budget (including deferrals and approvals made through the end of the first year) are generally expended in the first year. The remaining 40% of the project work and associated financing from the first year are carried forward into the next year. Delays occur for a variety of reasons, including: consultation with the public; approvals; tendering; availability of land, materials, equipment and/or people; weather; and lead times from ordering to receipt of goods. Plans and estimates are generally designed to ensure that, under ideal conditions with minimal delays, each project would still have the necessary funding to proceed.

With deferrals each year, a significant portion of the first year's planned work (and financing) in each five-year budget has already appeared in the previous year's budget. The following graph illustrates the total tax-supported capital budget approved for each year (when it was the first year of a five-year budget), and the subsequent actual expenditure for that year. Finance estimates the actual expenditure when planning the capital financing in order to avoid having more funds on hand than necessary for the year. Deferrals are dealt with in more detail in Chapter 4 (4.2).

CHART 3

The City of Calgary Tax-Supported Capital Budget Appropriation and Expenditure (\$ Millions)

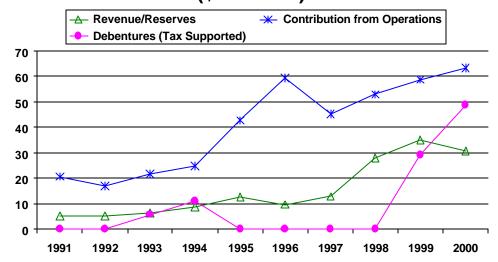


Sources: Budget Finalization Documents/ December 31 Status Reports

The tax-supported capital funds expended each year are provided from City contributions from operations (pay-as-you-go), revenue/reserves (e.g., revenue from sale of fixed assets, investment income from government grants, specific levies for capital such as storm surcharge and landfill rehabilitation) and debt funds supported by The City and individual property owners (local improvements); Provincial Government revenue sharing/grants; Federal Government grants; and private contributions (acreage assessments from developers and other third party contributions). The following two charts show how much each of these sources contributes:

Chart 4 (a)

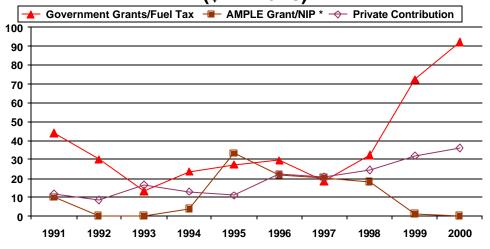
The City of Calgary Tax-Supported Capital Financing Internal Sources (\$ Millions)



Sources: Budget Finalization Documents/ December 31 Status Reports

Chart 4 (b)

The City of Calgary Tax-Supported Capital Financing External Sources (\$ Millions)



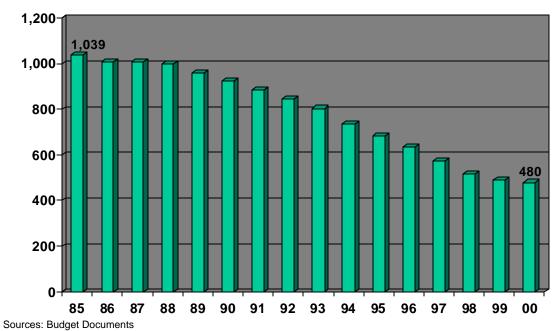
* AMPLE - Alberta Municipal Partnership in Local Employment; NIP - National Infrastructure Program Sources: Budget Finalization Documents/ December 31 Status Reports

The increased contributions from fuel tax sharing, private contributions and MPR-supported debt are readily evident in 1999.

The total tax-supported debt outstanding has declined each year since 1985 as a result of Council's policies initially prohibiting and later restricting new debt, as shown in the next chart:

CHART 5

The City of Calgary Tax-Supported Outstanding Capital Debt (\$ Millions)

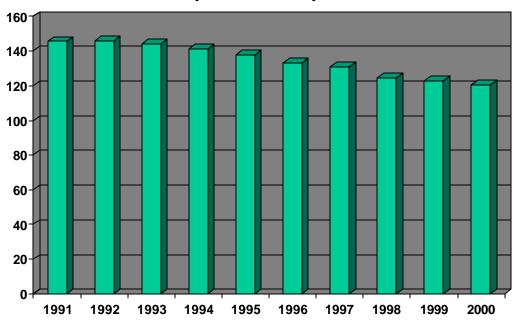


The remaining debt principal from debt taken out prior to 1999 will be paid off by 2010, providing the debt charge savings that are needed to support new infrastructure through the Major Project Reserve and Operating Initiatives Reserve.

The City's tax-supported debt servicing payments have declined with the debt, as shown in the chart below:

CHART 6

The City of Calgary Tax-Supported Net Debt Charges (\$ Millions)



Sources: Budget Documents

Debt servicing related to old debt is declining steeply, but is somewhat offset by service requirements for new major project debt.

The values of the tax-supported financial ratios for The City are shown in the following table for the period 1991 to 2000 (as presented in the 2002 Preliminary Budget Summary):

TABLE 1

The City of Calgary

Financial Ratios 1991 - 2000 TAX SUPPORTED						
Year	Debt Charges as a % of Operating Revenue	Own Sourced Financing as a % of Total Capital Expenditures	Debt as a % of Operating Revenue	Debt per Capita (1)		
1991	9.8	29	83	1,352		
1992		26	74	1,288		
1993	9.8	58	71	1,195		
1994	10.5	78	67	1,061		
1995	9.5	45	62	979		
1996	9.6	61	55	833		

57

62

52

45

740

656

683

692

48

41

41

REFERENCE: FB96-82 DEBT POLICY: CREDIT RATING FINANCIAL RATIOS

8.7

7.1

7.7

7.1

NOTE:

1997

1998

1999

2000

1. Per Capita Debt may differ from other documents as certain self-supported operations such as Fleet Services are included as tax supported for purposes of these ratio calculations.

These ratios highlight The City's improving financial position over the past ten years.

Later in the report, alternative ratios not including financial information from other organizations are recommended. (Several of the above ratios include school board debt and/or education tax revenue.)

Chapter 3 Current Tax-Supported Capital Financing Policies

Capital financing policies have largely focused on debt because it was the largest source of financing as well as a significant risk factor for municipalities. The risk rises with the level of debt because debt servicing payments are a fixed draw on resources and must continue to be made even if revenues fall or other expenditure requirements increase. This reduces flexibility and can potentially affect service levels if expenditure reductions are required.

As mentioned earlier, the current tax-supported capital financing policies are an accumulation of policies that were developed and approved to deal with particular capital financing circumstances and requirements faced by The City. They are summarized here including citations for the sources of the policies, and the complete recommendations adopted by Council are included in **Attachment 3**.

3.1 Capital Budget

- Council annually determines and sets a five-year capital budget planning envelope and breaks it down to its annual equivalents. (Financial Planning Task Force Oct. 1988)
- "Carried forward" appropriations or appropriations for projects that span more than one year do not need to be reapproved. (FB94-132)
- The deferral practice is to be phased out such that, for 2001 2005, annual capital budget appropriations will be limited to the annual funding available. (C96-15)

 The City of Calgary Transportation Infrastructure Investment Plan for the period 1998 to 2007 is subject to review, revision and financing by Council on an annual basis in conjunction with City Council's review of the Capital Budget. (TTP99-65)

3.2 Debt

- Council authorized the engagement of a Fiscal Agent for The City in order to allow borrowing on the open market if it became beneficial. A by-law was passed, but no open market borrowing was done and the arrangement has been inactive for a number of years. (1972 Nov.)
- Debenture funds are borrowed from whatever source provides the least cost to The City. (1972 Nov.)
- A program for potential open market borrowing is kept up-to-date. (1985 Jan.)
- Borrowing in foreign currencies is not actively considered. If the cost of funds in the
 domestic markets (including Alberta Municipal Financing Corporation (AMFC),
 Canadian and Euro-Canadian) is relatively unreasonable and/or an unusually large
 exchange rate differential from the norm occurs, then the policy would be opened for
 further consideration. (1985 Jan.)
- Financing for local improvements can generally have a term up to 15 years (C85-66). (Exceptions have been made where individual taxpayers or corporations wanted more costly work with a longer asset life done but found the payments for a 15-year amortization too high. In these cases, terms of 20 and 25 years have been approved.)
- To reduce debt terms, capital assets funded under AMFC regulations that qualify for a maximum term of ten years would be financed on a five-year term for borrowing purposes. (C89-16)

- The trend in debt reduction is to continue on a downward slope. (C98-16)
- A property tax increase of 1.7% of the 1998 assessment is used to fund
 Transportation infrastructure debt interest charges until a future Council replaces all
 or a portion of this increase with debt charge savings. These tax revenues flow into
 a Transportation Capital Financing Reserve which receives investment income.
 (C98-16)
- The following debt terms are used:
 - 15-year term for LRT line extensions and major interchanges (\$20 million or greater cost).
 - 10-year term for LRT cars.
 - 10-year term for other Transportation infrastructure, including buses, unless AMFC restrictions require a shorter term on certain types of infrastructure. (C98-16)
- For transportation and other specific major projects, The City will use "structured debt" whereby only interest is paid for a specified number of years (generally about half the term), after which the full debt is repaid as conventional annuity type debt over the remaining years. (C98-16)
- First priority in the use of debt is projects cost shared with the Province or other third parties. (C98-16)
- Debt can be used as a financing instrument for growth projects, and pay-as-you-go financing is targeted to maintenance/upgrade projects. (C98-16)

3.3 Major Projects Reserve

- 50% of the annual operating budget reductions resulting from debt retirement (debt charge savings), after any required contribution to the Capital Financing Envelope, is allocated to the Major Project Reserve to provide an equity component for major projects. The balance of the annual operating budget reductions resulting from debt retirement are retained for operating budget purposes. (C96-15)
- A first priority commitment of the portion of debt charge savings allocated to the Major Projects Reserve is the establishment of a sinking fund to repay the principal on "structured debt". (C98-16)

3.4 Capital Financing Envelope

- The Capital Financing Envelope is:
 - Set at \$276 million for 1996 2000;
 - Reviewed bi-annually to compensate for the effects of general inflation and population growth; and
 - Reviewed bi-annually for affordability. (C96-14)

3.5 Financial Ratios to Evaluate Long-Term Debt

- The following financial ratios are used by The City to evaluate its debt load:
 - a. Total debt as a percentage of total operating revenue (including utilities);
 (includes school boards)
 - b. Total debt per capita. (includes school boards)
 - (2) a. Tax-supported debt service costs (principal and interest) as a percentage of operating revenue (excluding utilities); (includes school boards)

- b. Tax-supported debt as a percentage of operating revenue (excluding utilities); (includes school boards)
- c. Tax-supported debt per capita. (includes school boards)
- (3) a. Own-sourced financing as percentage of total capital expenditures. (FB96-82)
- The debt ratios calculation methodology can be changed to reflect that used by the rating agencies. (FB96-82)
- The target for the tax-supported debt service as a percentage of operating revenue is that it not exceed 10%. (FB96-82) (The debt service and operating revenues include school boards, which have little debt service (\$969 thousand in 2001) and significant education requisition revenue (\$379 million in 2001). This causes the ratio to be about one-third lower than if they were not included.)

3.6 Pay-As-You-Go Contributions from Operations

- Pay-as-you-go financing is targeted to maintenance/upgrade projects. (C98-16)
- The pay-as-you-go contribution is first applied to finance capital projects with a life expectancy of five years or less, and any remaining amount is used to reduce longterm borrowing which would otherwise be raised through debentures (reducing those borrowings which have the highest interest rates). (Financial Planning Task Force Oct. 1988)
- The pay-as-you-go contribution increases by \$2.5 million per year. (Financial Planning Task Force Oct. 1988)

Current policies served Calgary well during the transition from high debt levels in 1985 to the current mix of pay-as-you-go and debt. However, some of these policies now

fragment City tax-supported capital-related funding into the present categories supported by municipal taxes:

- Pay-As-You-Go (PAYG)/Capital Envelope
- Debt Charge Savings
 - Major Project Reserve (MPR)
 - Operating Initiatives Reserve
- Infrastructure Canada-Alberta Program (ICAP) funding
- Transportation tax levy
- Major non-transportation infrastructure debt interest
- Debt service payments
- Business Unit contributions to reserves.

Chapter 4

Recommended Changes to Capital Financing Policies

In the past 15 years, The City has achieved significant tax-supported debt reduction. In recent years, significant parts of its transportation and other infrastructure have reached capacity, or major maintenance is required because of age and use. The City has used many options to obtain additional capital financing to meet the growth-related infrastructure requirements, including fuel tax revenue sharing from the Provincial Government, additional contributions from third parties, and committing savings from City debt reduction to support limited new debt for major growth-related projects. However, financing under existing policies is not adequate to meet immediate requirements.

The Administration believes it is important to reconsider some of the current City capital financing policies summarized in the previous chapter. This policy review is particularly timely given the current requirement for additional capital financing.

4.1 Financial Ratios

(FB96-82)

There are two sets of financial ratios that are important to The City: ratios which have mandated limits set by Provincial Government legislation, and ratios that The City uses to prudently manage its finances.

Provincial Regulation Governing Municipal Debt and Debt Service Limits

The overriding ratio limits that govern The City's maximum debt are those mandated by Provincial Government legislation, as defined in Alberta Regulation 375/94. The regulation specifies that Calgary's municipal debt (total of tax supported and self

supported) can be no more than twice its revenue, and debt servicing can be no more than 35% of revenue.

The City's debt reduction program has kept Calgary well within the Provincial Government limits. The limits, actual debt and debt service amounts, and percentages used (as disclosed in the City of Calgary 2000 Annual Financial Report) are:

TABLE 2
Provincial Government-Regulated Debt and Debt Service Limits

	<u>2000</u>	<u>1999</u>
Total Debt Limit	\$2,744 million	\$2,462 million
Total Debt (short and long term)	\$1,048 million	\$1,074 million
Percentage used	38.2%	43.6%
Total Debt Service Limit	\$ 480 million	\$ 431 million
Total Debt Service	\$ 214 million	\$ 208 million
Percentage used	44.5%	48.3%

City of Calgary Financial Ratios

From 1974 to 1995, The City's main policy with respect to financial ratios was that the portion of tax-supported expenditures devoted to debt repayment should not exceed 20%. The ratio exceeded the 20% limit in the mid-1980s because of the economic downturn that occurred just as The City was completing major infrastructure extensions required as a result of rapid growth in the late 1970s and early 1980s.

In 1995, after a debt reduction process was well established, Council approved a revised policy (FB95-26 Debt Policy: 20% Debt Servicing Guideline) that set the following reduction targets for the ratio Debt Charges as a % of Operating Expenditures:

- 1996/2000 no higher than 16.0%
- 2000/2004 no higher than 13.0%
- 2004/onward no higher than 10.0%

Report FB95-26 also called for the Administration "...to prepare an overview of various financial ratios for Council's consideration." The overview was prepared in 1996 (FB96-82 Debt Policy: Credit Rating Financial Ratios) with two main objectives:

- To ensure that The City retained its favourable credit rating (AA) in case it decided to borrow on the open market
- To meet City debt monitoring and control requirements.

When The City was first evaluated by a credit rating agency in the mid-1980s, it was rated AA despite its \$1 billion tax-supported debt and debt servicing payments exceeding 20% of total expenditures. However, credit ratings have become more conservative through the years, and a rating under the same conditions would likely be lower today.

When FB96-82 was prepared, it was identified that The City's credit rating agency (Standard and Poor's) was using a different debt service ratio than The City was. It was suggested that replacing The City's ratio with the one used by the credit rating agency would provide "...an important financial ratio that may be more comparable to numbers for other jurisdictions." It was also suggested that it would be beneficial to introduce "...a few more ratios which appear to be prominent in financial ratio analysis...(to) put financial ratio analysis into proper perspective, i.e. that there is more than one financial ratio that is the basis for the evaluation of credit worthiness."

The ratios approved from FB96-82 were:

(1) a. Total debt as a percentage of total operating revenue (including utilities);[includes school boards]

- b. Total debt per capita. [includes school boards]
- (2) a. Tax-supported debt service costs (principal and interest) as a percentage of operating revenue (excluding utilities); [includes school boards]
 - b. Tax-supported debt as a percentage of operating revenue (excluding utilities);
 [includes school boards]
 - c. Tax-supported debt per capita. [includes school boards]
- (3) a. Own-sourced financing as percentage of total capital expenditures.

The City's debt service ratio prior to approval to use the new ratios measured what percentage of its tax-supported gross expenditure (net of recoveries) was represented by its tax-supported debt servicing. Standard and Poor's ratios, on the other hand, included school board debt, debt servicing and operating revenue including education requisitions collected as property tax by The City for education purposes.

Changing to the new debt service ratio resulted in a significantly lower percentage figure for the same year, as illustrated in Table 2 that compares the two ratios for the period 1991 to 2000. This was because the tax revenue collected for the education requisition was relatively large while school boards had little debt. The new ratio ended up being one-third less than the old ratio because school board revenue was included in the calculation.

TABLE 3

The City of Calgary Tax Supported Debt Servicing Ratio Alternatives 1991-2001					
	Debt Servicing as a % of Operating Expenditure (Net of Recoveries)	Debt Servicing as a % of Operating Revenue (including School Boards)			
1991	17.3	9.8			
1992	16.3	9.3			
1993	15.8	9.8			
1994	15.7	10.5			
1995	15.0	9.5			
1996	14.4	9.6			
1997	13.6	8.7			
1998	12.0	7.1			
1999	11.1	7.7			
2000	10.6	7.1			
2001	8.4	5.7			

Sources: Financial & Economic Reviews/ Budget Documents

A 10% debt service ratio limit using the new ratio (including school boards) was equivalent to a 15% limit using the old ratio.

A comparison of 1999 bond rating, financial and other information on a number of Canadian municipalities is included as **Attachment 4**.

Five of the six ratios currently used by The City include school board debt, debt service and/or operating revenue over which The City has no control. The sixth ratio, Own Sourced Financing as a % of Total Capital Expenditure, can fluctuate from year to year as total contributions from other levels of government fluctuate, as is apparent in Table 1 (Chapter 2 - Historical Trends). Therefore, a low ratio may not in itself indicate a lower self-sufficiency but reflect the timing of government programs.

The previous ratio that calculated the tax-supported debt service cost as a percentage of tax-supported gross expenditure (net of recoveries) served The City well for many years. It was also a more conservative ratio than the current one – the current 10% limit

(including school boards) is equivalent to a 15% limit for the pre-1996 ratio.

A 10% limit on the debt service to gross expenditure ratio (excluding school boards) would represent an advance on the timetable set in FB95-26, which called for a 13% limit from 2000-2004 and a 10% limit beyond 2004.

Recommendation 1

The following ratios are to be used by The City of Calgary to evaluate its debt position:

- a) City tax-supported debt service cost as a percentage of City taxsupported gross expenditure (net of recoveries).
- b) City tax-supported debt per capita.
- c) City total debt per capita (including utilities).

Recommendation 2

The target for the City tax-supported debt service as a percentage of City tax-supported gross expenditure (net of recoveries) is that it not exceed 10%.

Recommendation 3

If City tax-supported debt service as a percentage of City tax-supported gross expenditure (net of recoveries) exceeds 10%, the Administration will prepare a recommended plan for returning it to the 10% level.

The detailed calculation of City tax-supported debt service as a percentage of City tax-supported gross expenditure (net of recoveries) is illustrated in **Attachment 5**.

The maximum 20-year debt capacity serviceable within the 10% limit on an ongoing

basis is shown in the following table. Projected funding from current sources would not be sufficient to service this maximum capacity.

TABLE 4

The City of Calgary Maximum Tax-Supported Borrowing Capacity

Debt Servicing As % Of Gross Expenditure (Net of Recoveries) Not Exceeding 10% Additional Borrowing Based On 20-year Amortization (interest rate @6.25%)

Year	Planned Borrowing in 2002 Capital Budget	Additional Borrowing Capacity *	Total New Borrowing Capacity	Debt Servicing Ratio **	Debt Outstanding	Debt Per Capita ***
2002	44,258	150,000	194,258	8.73%	592,750	661
2003	53,895	150,000	203,895	9.52%	733,694	804
2004	55,340	100,000	155,340	9.74%	824,287	890
2005	53,000	100,000	153,000	9.96%	907,847	961
2006	50,000	100,000	150,000	9.98%	987,020	1,025
2007	23,958	100,000	123,958	9.64%	1,042,815	1,067
2008		100,000	100,000	9.46%	1,072,817	1,081
2009		100,000	100,000	9.54%	1,105,007	1,097
2010		140,000	140,000	9.00%	1,180,956	1,155
2011		140,000	140,000	9.04%	1,251,396	1,206

^{*} assumed mid-year borrowing

4.2 Continuous Decline in Debt

(C98-16)

If The City was able to obtain financing for its immediate tax-supported capital infrastructure requirements while continuing to reduce its outstanding tax-supported debt, retaining this policy would be beneficial because it would continue to improve The City's financial position. However, projected financing has not been adequate for the critical tax-supported capital projects that Calgary needs in recent years and for the near future.

^{** 2002-2006} based on projected financing available (not projected expenditure); projected 3% annual expenditure increases starting in 2007.

^{*** 2002-2006} based on population projected by Corporate Economics; projected 1.5% annual population growth starting in 2007.

At this time, the only way to obtain the required capital financing without additional tax increases would be through taking out more debt than the amount of existing debt paid off each year. As a result, it is necessary to decide whether The City is capable of taking out more debt and, if so, what level would be manageable and prudent:

- The City can borrow the amounts that it would require from the Alberta Municipal Financing Corporation.
- The City was able to manage the \$1 billion tax-supported debt from 1985, which required more than 20% of expenditure to service. At that time, The City was smaller and had far less revenue than today. Any additional borrowing now would have to be serviceable with no more than 10% of tax-supported expenditure (as recommended above), which would be less than half the level of 1985.
- While we cannot predict future ratings, we know that Calgary's rating is AA, as it was
 in 1985 when its debt was high.
- Calgary is allocating half of its debt charge savings to make principal repayments on new debt. Thus, without additional tax increases, The City has significant capacity to service debt beyond what has already been budgeted. This can be done without debt service exceeding 10% of tax-supported expenditure (as illustrated in the simulation in Chapter 5).

Calgary has shown the will to manage its debt since 1985, and it has the necessary capacity to repay debt without additional tax increases. Calgary handled its debt well during past economic downturns, so even if economic factors became negative, they could be handled again because there would be a much lower percentage of resources devoted to debt servicing.

At this time, the alternative to allowing the outstanding debt to increase would be to defer the required capital projects until The City accumulates enough funds to pay for them. This does not seem to be acceptable because it would take many years, so allowing the outstanding tax-supported debt to increase is a reasonable alternative.

Recommendation 4

The City of Calgary can increase its tax-supported total outstanding debt as long as debt servicing does not exceed 10% of gross expenditure (net of recoveries).

4.3 Debt Term

(C98-16)

The reason for having a shorter debt term is that it costs less in interest and the debt capacity is regained sooner. However, it is worth considering longer debt terms because:

- 1. The standard term allowed by lenders is the life of the asset.
- 2. There is an immediate requirement for more capital infrastructure than can be serviced with current financing, and extending the term will increase capacity if it is required.

Immediate capacity for building infrastructure could be increased by extending the term of new debt beyond the current general 10 years (maximum of 15 years for LRT extensions and major interchanges) to 20 years. Doing so would allow more required projects to begin sooner, although fewer projects could then be done in later years because some capacity would already have been used.

Recommendation 5

The maximum debt term is 20 years.

4.4 Use of Structured Debt

(C98-16)

The structured debt policy was approved in 1998 because The City's cash flow in the early years of the present capital infrastructure expansion was inadequate to support regular amortized debt servicing payments that would be required. However, thanks to savings from paying off existing debt in later years, it was projected that larger payments would be possible five to seven years after taking out the debt. The structured debt requires only interest payments for the first half of the term, followed by payments to cover interest plus principal in the latter half of the term.

The interest cost for structured debt is higher because no principal is repaid in the early years and the rate is higher (previously by 0.42%, currently by 0.1875%).

While it was necessary to implement the structured debt policy in order to build the capital infrastructure that is required immediately, other types of debt, such as regular amortized, could be used to reduce interest costs whenever practical. This would also maintain debt capacity as much as possible.

Recommendation 6

Low-cost forms of debt are to be used whenever practical in order to minimize cost and maintain debt capacity.

4.5 Elimination of Capital Deferrals

(C96-15)

As mentioned earlier, there are many reasons for deferrals. While it would be convenient if the estimates of expenditure timing for each project were exact, there will always be delays to some projects while others will get ahead of schedule. If deferrals were not permitted, there would be frequent requirements to get permission to transfer

funds from one program to another so that projects that were ahead of schedule could continue and funds would not be tied up with delayed projects. There would presumably be no change to the amounts ultimately spent on each project, but there would be a lot more administrative work getting approvals and transferring funds.

Based on past experience, Finance estimates the amount of deferral each year to ensure the necessary amount of funding is available. If an unexpected amount of work was completed in one year (this has only happened once in the past 15 years), it would simply require that funds be borrowed on a short-term basis. However, the additional requirement would be offset by a reduced carryforward into the next year. If the percentage of appropriation expended in the first year rose for more than one year, Finance would gradually adjust its estimated expenditure and carryforward proportions for future years. The total value of projects would not change without Council approval.

The operations may improve the accuracy of their estimated annual requirements by getting project work done more quickly and/or making estimates more consistent with past experience. If projects, on average, are started and/or completed earlier, The City will pay a bit more to supply the funds sooner, but the projects will provide service to the public sooner as well.

The fact that some pay-as-you-go funds are always left uncommitted in the second through fifth years could also mitigate the future impact of any increase in the percentage of appropriation expended in a particular year.

Recommendation 7

Capital deferrals are permitted, and the Administration will include the amounts and percentages of deferrals for each of the previous five years in each year's capital budget.

Chapter 5

Potential Additional Capital Financing

There is a demand for capital infrastructure projects each year that cannot be funded. As a result, there it is often necessary to look for ways to increase funding from existing sources or to find new sources. This chapter provides some possible ways to increase capital financing.

5.1 Increasing Financing from Existing Sources

Utilizing Existing Debt Capacity

Estimates of debt capacity are affected by a number of projections and assumptions, including:

- Interest rates
- Term of borrowing
- Type of repayment schedule (e.g., principal and interest each year; only interest payments for the first half of the term followed by interest and principal payments for the balance of the term)
- How far into the future borrowing will continue
- Sources and amounts of funds for debt servicing
 - whether and what level of funds will remain unallocated to provide flexibility in the event of changes that increase anticipated borrowing costs or decrease available funding
- What policies will apply
 - whether total debt can increase or not
 - what percentage of total expenditure can be used for debt servicing
 - maximum debt term.

Although it would be possible to provide a wide variety of simulations to calculate taxsupported debt capacity based on varying assumptions, this section will focus on one reasonably **conservative** simulation and will describe how changes in some assumptions would affect the results. The simulation is based on the following (including policy changes recommended in the previous chapter):

- New borrowing to finance projects included in the 2002-2006 capital budget and 1998-2007 Transportation Infrastructure Initiative Program will take place as indicated in the budget and is not part of the additional capacity determined by the simulation.
- 2. No additional tax increase(s) would be required. New debt servicing will come from existing funding sources as currently projected.

3. Policies

- a) Outstanding tax-supported debt can increase. (Recommendation #4)
- b) The maximum term is 20 years. (Recommendation #5)
- c) Tax-supported debt servicing (interest and principal) is limited to a maximum of 10% of the City tax-supported annual gross expenditure (net of recoveries). (Recommendation #2)
- d) Half of debt charge savings will be contributed to each of the Major Project Reserve and Operating Initiatives Reserve. (existing policy)

4. Debt terms of 20 years

Major projects could have debt terms of 20 years.

5. Regular amortized debt (interest and principal payments throughout the term)

Borrowing planned for major projects through 2007 is based on structured debt (only interest payments for the first half of the term, interest and principal payments for the second half of the term) because it can be serviced with lower cash flow in the early years.

When cash flow is not an issue, regular amortized debt would be used because it has a lower interest cost. Basing the simulation on regular amortized debt also leaves a margin of flexibility if conditions later change and it becomes necessary to reduce cash flow requirements for new debt in the early years.

6. An average interest rate of 6.25%

6.25% was approximately the average rate for 20-year regular amortized debt during 2001. Recent rates are somewhat lower but they are also historically low, so the 6.25% rate allows a slight margin for higher rates in the future.

7. Population and City revenue growth as projected in Budget 2002 (2002-2006)

After 2006, population increases at an average annual rate of 1.5% and gross expenditure (net of recoveries) increases at 3% per year reflecting both growth and inflation. These levels are slightly lower than historical norms for Calgary.

8. All Major Project Reserve (MPR) funds used

The City would continue to borrow funds each year to the extent that principal repayments would use all MPR funds. The amount of borrowing would be relatively smooth from year to year (i.e., fluctuations would be gradual).

9. Operating Initiative Reserve used for some debt interest

All of the funds from the 1.7% tax levy initiated in 1998 would be used for debt interest payments. The Operating Initiatives Reserve would cover additional interest payment requirements, but it would also retain unallocated funds for other purposes.

Additional Debt Capacity Determined by the Simulation

The simulation results in Table 5 below (more detailed results are included in **Attachment 6**) indicate that debt charge savings allocated to the MPR would be able to support principal repayments on a total of up to \$350 million of additional borrowing over the next five years based on an average term of 20 years.

The table shows the contributions to the Major Project Reserve (MPR) each year. The simulation uses all of the funds contributed to the MPR and Tax Levy Reserve eventually, but not necessarily in the year the funds are received. The interest amounts under Tax Levy Reserve and Operating Initiatives Reserve are the required debt interest payments each year. The unallocated funds remaining in the Operating Initiatives Reserve after debt interest payments each year are also shown.

TABLE 5

The City of Calgary Tax-Supported Borrowing Capacity Not Requiring Additional Tax Increase

Debt Servicing As % Of Gross Expenditure (Net of Recoveries) Not Exceeding 10% Borrowings Based On 20-year Regular Amortization (interest rate @ 6.25%)

		Fi	inancial Ratios		Debt	Payment Fun	ding	
					Principal	Inte	rest	Remaining
	Additional	Debt			Major		Operating	Operating
	Borrowing	Servicing	Debt	Debt Per	Project	Tax Levy	Initiatives	Initiatives
Year	Capacity *	Ratio **	Outstanding	Capita ***	Reserve	Reserve	Reserve	Reserve
2002	70,000	8.53%	512,750	572	5,036	-	-	-
2003	70,000	8.81%	575,811	631	3,939	4,375	-	-
2004	70,000	8.65%	640,770	692	5,792	-	8,798	5,552
2005	70,000	8.73%	699,764	740	7,033	889	11,882	7,004
2006	70,000	8.61%	755,503	784	11,591	22	16,754	9,296
2007	60,000	8.11%	779,069	797	14,244	-	21,276	11,424
2008	60,000	7.77%	778,385	784	16,778	-	25,594	13,456
2009	60,000	7.68%	781,531	776	18,733	-	28,926	15,024
2010	60,000	6.90%	790,179	773	21,686	-	33,958	17,392
2011	60,000	6.61%	796,228	767	22,504	-	35,352	18,048

^{*} assumed mid-year borrowing

Effects on the Simulation of Changing Some Assumptions

- 1. If some funds were borrowed for less than a 20-year term, the MPR could still support more than \$300 million over the first 5 years.
- 2. A 1% interest rate increase would require use of an additional 13% of the total debt charge savings contributed to the Operating Initiatives Reserve each year to cover the increase in interest cost. In this example, increasing from 6.25% to 7.25% would increase the percentage of the reserve used for debt interest from 68% to 81%.

^{** 2002-2006} based on projected financing available (not projected expenditure); projected 3% annual expenditure increases starting in 2007.

^{*** 2002-2006} based on population projected by Corporate Economics; projected 1.5% annual population growth starting in 2007.

3. Using structured debt in the early years would increase the amount that could be supported by the MPR (up to \$150 million in each of 2002 and 2003) because there would not be any principal repayments for the first half of each term. However, interest payments would then use all of the funds from the Operating Initiatives Reserve from 2004 to 2011 unless there was less borrowing than the MPR could support during that time.

The more detailed table from the simulation (**Attachment 6**) shows the effects of borrowing the full capacity that would require almost 10% of total expenditure for debt servicing from 2002 to 2030. If more funds were available for debt servicing and growth was at least as high as simulation assumptions, The City could theoretically borrow up to an additional \$140 million per year for the next six years and still stay within the limit of spending no more than 10% on debt service each year.

Obtaining More Funding from Other Orders of Government

The City of Calgary has made recommendations to the federal Task Force on Urban Issues that municipalities receive more federal grants and a share of the GST.

The City of Edmonton has identified \$2.5 billion of unfunded capital infrastructure requirements by 2010 in its "2001-2010 Long Range Financial Plan". They are hoping to obtain additional assistance from other orders of government to assist with these requirements. The City of Calgary could jointly pursue this with Edmonton and any other municipalities in a similar situation.

5.2 Obtaining Financing from New Sources

Reserves and Liabilities

Some portions of City reserve and liability funds are not required for many years. They

are currently invested to produce income either for the fund or for general City purposes. Instead of investing these funds in financial instruments, they could be used for low-risk City projects that would generate revenue or savings that could be used to repay the funds plus a suitable return on the investment. Projects that also promote other City Council priorities such as infrastructure upgrading and energy conservation and environmental goals could be a high priority for this type of financing.

Potential Transportation-Specific Sources

Transportation requires the largest amount of capital financing at this time. Analysis in 1999 identified a number of potential new sources of financing. The information below was obtained at that time, so revenues and/or costs may have changed somewhat since then. The City is continuing to actively pursue these ideas. Some of the potential sources would require lengthy evaluation and development processes, so they should be considered longer-term possibilities. Some of the revenue sources are currently within Council's mandate, while others require legislative change.

Transit Fare Surcharge

A fare surcharge or additional charge for each customer trip would be built into the cost of each cash fare, ticket and pass. After allowing for potential ridership loss as a result of increasing fares, the net revenue gain was estimated to be \$1.75 million per year for each \$0.05 of surcharge.

Adopting a fare surcharge to finance capital requirements would need to be weighed against the revenue support needed to fund ongoing transit operations. Most transit customers would not distinguish between ordinary fare increases and a capital surcharge. Applying a surcharge could affect Calgary Transit's ability to implement future fare increases required to fund ongoing operations and offset the costs of inflation and service expansion.

Parking Charges at LRT Park 'n' Rides Lots

Currently, parking is free at all Calgary Transit park 'n' ride locations. This is consistent with most Canadian cities. The free parking encourages ridership and keeps cars out of the central part of the city. Should parking charges be considered, several options to collect parking fees are possible, including entrance booths and gates; parking meters; smart cards in conjunction with bus passes; and pay-and-display machines. The Calgary Parking Authority advised that pay-and-display machines could be installed at 24 park 'n' ride locations for approximately \$700,000 (70 machines).

If each park 'n' ride user paid \$1 per day, and all spots were used, the potential revenue would be approximately \$1.5 million per year (net of \$200,000 in incremental operating costs).

Development Potential Around LRT Stations

The City could eventually franchise or lease development rights for space above or adjacent to transportation facilities to private investors in return for the provision of services to the public or financial contributions. This could provide a flow of income for the life of a lease.

City policy is that development of LRT station areas will be of a type, intensity and design that can be integrated with adjacent communities and supportive of the transit system.

Investigation of development potential of the Anderson LRT Station and the lands around 146 Avenue Station was encouraging to LRT-supportive development staged to respond to the market. Real estate and development industries showed interest, but the anticipated value would not yet justify "air rights" development over LRT and station facilities. It should be possible over time to exploit opportunities for private development in conjunction with or contiguous to LRT stations, which would benefit the transit system and provide additional revenue.

Development Levy (Acreage Assessment)

Section 648 of the Municipal Government Act (MGA) allows municipalities to establish "off-site levies" to pay for capital costs of water, wastewater and drainage expansion associated with land that will be developed or subdivided. Municipalities can also require developers to construct or pay for construction of a road to access the development as a condition of a development permit.

The infrastructure included in the development levies has been limited to that which is directly needed to service the developed area. Currently it is not possible under the MGA for municipalities to require developers to pay for major arterial roadways which are related to traffic generated by the development but located some distance away. However, this has been achieved to some extent through negotiations between the Urban Development Institute and The City.

Change to the MGA would be required to include in development levies transportation upgrades necessary because of traffic impacts resulting from the development. If this change could be obtained, it would give municipalities the same flexibility that exists under the special taxation provisions of the MGA, which allow recovery of transportation costs at the time of development. (Increases in Acreage Assessments and other development levies may directly impact the cost of housing).

Downtown Parking Tax

There were almost 41,000 parking spaces in surface lots and parking structures in Calgary's central business district (CBD), excluding stalls for residential use and onstreet parking. A levy of \$0.25 per space fee weekdays or \$5.00 per space fee monthly on all non-residential stalls would raise approximately \$2.4 million per year.

Another option would be to levy a sales tax on parking. Currently, the Municipal Government Act does not allow The City of Calgary to levy a parking tax.

Emissions Trading

In December 1997, Canada and 150 other countries met in Kyoto, Japan and successfully negotiated greenhouse gas emission reduction commitments for industrialized nations. Canada's target is to reduce average annual greenhouse gas emissions to six percent below 1990 levels by 2008-2012.

One potential greenhouse gas management option is emission trading. A typical greenhouse gas emission reduction trade occurs when a firm, which achieves more pollution reductions than are required, sells its extra reductions to another firm that is unable to meet its emission reduction requirements due to the high cost of its options for reducing emissions.

Emissions trading has potential to generate funds for The City of Calgary. The City may wish to participate in credit trading if it can generate emission reductions through LRT system expansion and use of wind power. The resulting reduction in bus fleet requirements may also earn emission credits. More study is required to quantify the potential emission reductions and potential monetary value of trading the credits.

The Federal Government could also decide to provide funds to help urban transit systems attract more commuters if it decided the resulting emission reductions would help it to meet its Kyoto commitment.

Vehicle Registration

Montreal and the Greater Vancouver Transportation Authority were authorized by their provincial governments to collect \$30 per vehicle each year.

With an estimated 585,000 vehicles registered in Calgary in 1999, a \$30 surcharge per vehicle would generate \$17.5 million per year. Provincial Government authorization would be required.

Fuel Tax from the Federal Government

Calgary has a revenue sharing agreement with the Province of Alberta to receive 5 cents per litre of vehicle fuel sold in Calgary (the Provincial Government has proposed 4.25 cents per litre effective April 2002 for two years) to be used for transportation capital projects. This effectively provides funds from users of the transportation system to expand and maintain the system.

The Federal Government also taxes fuel. The Canadian Urban Transit Association discussed with the Federation of Canadian Municipalities a collaborative effort to lobby for a portion of fuel tax to be directed to urban transportation. The proposal included a call for the Federal Government to "...provide an annual revenue stream of at least 3 cents / litre to participating urban areas based on the excise tax on fuel which it collects in each urban area, provided that the relevant provincial government dedicates an equal amount." Alberta already provides more than the requested 3 cents per litre.

The City of Calgary submission to the federal Urban Affairs Task Force also advocates a sharing of fuel tax with the municipalities.

As of 1999, 3 cents per litre in Calgary would have generated approximately \$42 million annually.

Congestion Pricing

Congestion pricing involves issuing a special licence or permit to allow the use of specific roads during certain times of the day such as peak travel periods. A variable fee may apply. The primary objectives are to generate revenue and to reduce travel demand during peak periods, thus reducing congestion and the need for additional investment in road infrastructure.

For example, a charge of \$1.00 per day for driving downtown, if applied to 50,000 trips per day for 250 working days per year, would generate about \$10.5 million per year after estimated operating costs. In addition to generating revenue, this strategy can have a significant impact on the land use and economic vitality of the areas surrounding and within the central business district.

Chapter 6

Conclusions

- 6.1 The City has both tax-supported and self-supported capital financing requirements. The self-supporting Water and Wastewater utilities have their own capital and debt policies, and have no impact on The City's tax-supported capital financing requirements.
- 6.2 Debt policies were added and changed as The City's debt position, infrastructure requirements and economic circumstances changed. In general, the changes were made to deal with challenges and/or to take advantage of opportunities while maintaining the trend to reduce the overall tax-supported debt since 1985.

The existing debt policies have guided The City's debt reduction from the point where most tax-supported capital expenditures were funded by debt, grants and third-party contributions to where The City uses significant pay-as-you-go funding (currently \$276 million over five years) and Provincial Government revenue-sharing contributions for annual capital expenditures. The total debt has declined by more than half since 1985 and continues to decline.

- 6.3 Some of the present capital financing policies could be reconsidered in light of The City's improved financial position and the increasing growth-related infrastructure requirements:
 - The City currently uses some of the same ratios previously used by credit rating agencies to evaluate municipal financial strength. Most of these ratios include revenues and/or debt of school boards, over which The City has no control. Using ratios that include only City financial information would be a more relevant measure of the impact of The City's activities. (Credit rating

agency ratios could still be monitored periodically to review comparable numbers available for other major cities in Canada.)

- Limiting City tax-supported debt service to 10% of City gross expenditure (net of recoveries) is equivalent to a limit of 7% for the current policy ratio of tax-supported debt service (including school boards) to operating revenue (including school boards). If the policy was changed to use the debt service to gross expenditure ratio, The City could stay within a 10% limit (even though it is more restrictive) and still be able to increase borrowing for required capital.
- Capital infrastructure benefits people for many years into the future, so it is
 fair for future taxpayers to contribute by paying some of the costs. Using
 some debt allows a portion of the costs to be spread out among those
 benefiting. Debt service costs are now well below the maximum allowed, so
 the policy requiring a decline in total outstanding tax-supported debt each
 year may be unnecessarily restricting The City's ability to provide required
 infrastructure.
- The current policy maximum debt term of 15 years for LRT extensions and major road interchanges, and maximum 10 years for all other debt, is far less than the life of most major capital infrastructure components. These relatively low maximums reduce interest costs and allow debt to be repaid quickly. However, allowing a slightly longer term when required would permit more financing to be obtained when there is not enough to meet capital requirements. Increasing the maximum term to 20 years for infrastructure with a life greater than 20 years would increase flexibility to provide required infrastructure.
- Using structured debt has allowed more capital projects to be funded earlier than would have been possible using alternative forms of debt including

regular amortized debt. However, structured debt results in additional interest costs and reduces City financial flexibility.

- Eliminating capital financing deferrals as required by policy would provide a more accurate picture of the amount of capital funds to be spent in the next year. However, with uncertainties and delays to projects as experienced in the past, this would create an administrative burden related to obtaining approvals to transfer funds between projects. It would also result in additional project delays while waiting to identify and approve transfers. Eliminating deferrals would reduce flexibility but would not reduce costs. Improving deferral estimating and reporting would provide necessary information without reducing flexibility and without increasing administrative approval requirements.
- 6.4 There are a number of potential ways to increase near-term capital financing. Some possibilities involve increasing the amount(s) obtained from existing sources such as debt and other levels of government. Other methods would utilize new sources such as investments from City reserve and/or liability funds, or a wide variety of transportation user-based fees/levies or other innovative long-term approaches.

Attachments

- 1. Utility Capital Financing Policies
- 2. Tax-Supported Capital Infrastructure Financing Diagram
- 3. Tax-Supported Capital Financing Policies Adopted by Council
- 4. 2000 Overview of 1999 Canadian Municipalities' Bond Rating and Related Information
- 5. Debt Servicing Ratio Calculation
- 6. Debt Capacity Simulation
- 7. Capital Financing Reports Containing Policies in Effect as of 2002 January

Attachment 1

The City of Calgary

Utilities' Capital Financing Policies

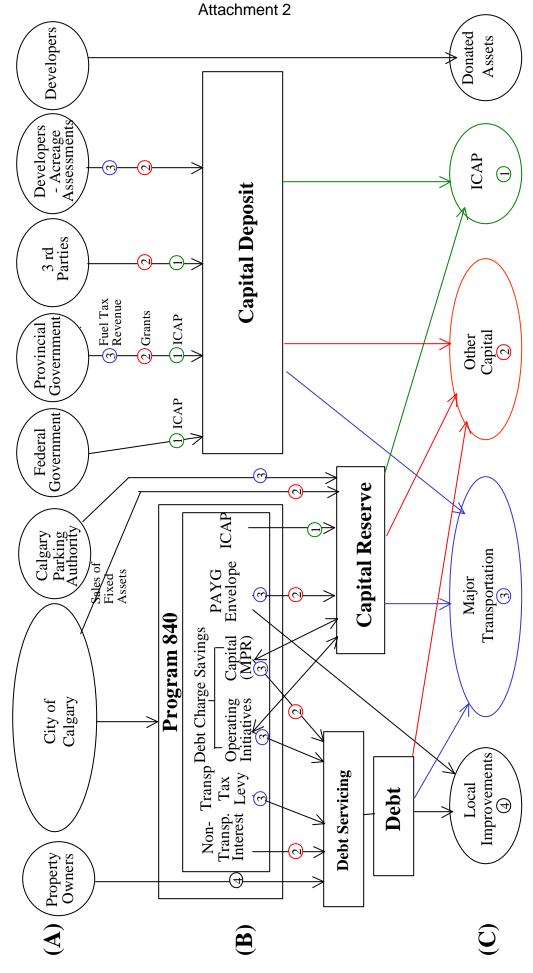
Waterworks Capital Financing Policy (FB97-38)

- Pay-as-you-go funds are to be used for capital projects that have lower costs, are part of an ongoing improvement program, or will reduce operation and maintenance in future (e.g. replacements and extensions, small tools and equipment, computer hardware);
- 2. Debt financing shall be used for capital projects that are substantial in cost and size and where the benefits extend over a relatively long period (e.g., plant upgrades, pump stations, reservoirs, and feedermains);
- 3. The maximum debt term remain at 15 years and the return on equity be fixed at the year 2004, and subsequent years, at \$25,000,000, to be reviewed every five years;
- 4. Authorize the Administration to phase in the new capital financing guidelines.

Wastewater Capital Financing Policy (FB98-17)

- Use pay-as-you-go funds for capital projects that have lower costs, are part of an ongoing improvement program, or will reduce operation and maintenance costs in future (e.g. replacements and extensions, small tools and equipment computer hardware);
- 2. Debt finance capital projects that are substantial in cost and size and where the benefits extend over a relatively long period (e.g. plant upgrades, lift stations, new trunks);
- 3. That maximum debt term be 15 years;
- 4. Return on equity be fixed at the year 2004 and subsequent years at \$12.5 million , to be reviewed every five years.

Tax-Supported Capital Infrastructure Financing The City Of Calgary



Note: Numbers (1,2,3,4) refer to classification of projects the funds are being used for.

Source: Financial Planning, Budget and Reporting Division, Finance Business Unit

Attachment 3

The City of Calgary

Capital Financing Policies

- TTP2000-09 "1. Approve the proposed Heads of Agreement [as amended] for The City's contract with the yyC.T Joint Venture and authorize the Administration to conclude and execute the Agreement.
 - 3. That innovative project development services shall be defined in the Agreement." (adopted as amended)
- C99-15 "1. Direct the Administration to issue a Request For Proposals (which would include the features outlined in Attachment 1) to select a firm or consortium which will enter into a long-term public/private partnership (PPP) with The City of Calgary for the project management and implementation of transportation infrastructure, the extent of which will be dependent on the availability of funding" (adopted)
- TTP99-65 "1. Approve Attachment 3 to this report as The City of Calgary Transportation Infrastructure Investment Plan for the period 1998 to 2007. This Plan is subject to review, revision and financing by Council on an annual basis in conjunction with City Council's review of the Capital Budget" (adopted as amended).
- C98-16 "1. Debt be reinstated as a financing instrument for growth type projects only (present policy is no debt 1995/99) and Pay-As-You-Go financing be targeted to Maintenance/Upgrade type projects.
 - 2. First priority in the use of debt will be projects cost shared with the Province or other third parties
 - 3. Bullet (Interest Only) Debt or Retractable Debt (if available from AMFC) be used rather than Conventional Annuity Type Debt for these Transportation projects. [These types of debt were not available from AMFC. Instead, AMFC approved a type of debt whereby only interest is paid for a specified number of years, after which the full debt is repaid as conventional annuity type debt over the remaining years. City Council has approved borrowings of this type and The City refers to it as "structured debt".]
 - 4. The following debt term options be selected:
 - 15-year term for LRT line extensions and major interchanges (\$20 million or greater cost).
 - 10-year term for LRT cars.
 - 10-year term for other Transportation infrastructure, including buses, unless AMFC restrictions require a shorter term on certain types of infrastructure.
 - 5. A first priority commitment of future Debt Charge Savings (of that portion allocated to the Major Projects Reserve) be the establishment of a sinking fund to repay the principal on term type debt.

Attachment 4



Canadian Municipal Governments - 2000 Overview - Page 4

	AAA	AA	AA (high)	AA (low)	AA (high)	AA (high)	AA (high)	AAA	AAA
-	VANCOUVER	CALGARY	EDMONTON	WINNIPEG	TORONTO	OTTAWA	HAMILTON	PEEL	HALTON
	6661	1999	1999	1999	1999	1998	1999	8661	1999
FISCAL PERFORMANCE AND DEBT									
(\$ per capita)	,		,		,				
Operating surplus/(deficit)	130	297	338	247	263	399	261	432	200
Core surplus/(deficit) after capital expenditures	(118)	53	189	94	(25)	120	44	184	184
Municipal property taxes	269	733	637	773	1,106	1,227	982	792	891
Total property taxes & user fees	1,646	1,716	1,493	2,002	2,414	2,181	1,766	1,746	1,828
Net direct tax-supported debt (1)	315	586	107	942	351	488	261	16	153
Net tax-supported debt, cont. liab. & long-term commitments (2)	1,133	621	196	1,144	993	728	632	210	419
Gross capital expenditures	295	444	565	200	501	371	271	279	373
DEBT SERVICING AND LIQUIDITY									
Gross interest costs/onerating expenditures	4.3%	11.5%	5.1%	12.2%	2.7%	4.4%	3.2%	0.5%	1.7%
Operating surplus/gross interest costs	3.08X*	2.23X	5.72X	1.44X	4.62X	4.83X	4.95X	84.00X	23.97X
Liquid assets/current liabilities	1.02X	2.14X	5.31X	1.07X	0.95X	1.83X	1.32X	8.07X	4.91X
Liquid assets/net direct tax-supported debt	1.29X	1.12X	12.55X	0.57X	1.76X	1.44X	2.75X	91.56X	9.16X
TOTAL TAXES AS % OF TAXABLE ASSESSMENT	1.14%	1.60%	1.30%	3.70%	2.90%	3.20%	3.00%	2.11%	1.90%
TAX ARREARS AS % OF CURRENT LEVY	2.0%	2.1%	5.1%	5.4%	7.9%	8.0%	12.3%	10.2%	6.2%
ACCUMULATED FUNDS BALANCE	%56	20%	%109	\$4%	46%	118%	%86	745%	287%
		19%	81%	38%	%61	38%	. 32%	118%	75%
per capita (\$)	1,077	313	1,179	621	485	855	620	1,561	1,200
ECONOMY									
Population (000s)	558	841	648	628	2,529	765 (1999)	493	406	364
Population growth	1.0%	2.7%	1.9%	0.1%	0.8%	2.0% (1999)	0.1%	2.4%	2.9%
Taxable assessment growth	(4.4%)	n.m.	n.m.	0.7%	0.8%	1.8% (1999)	0.9%	n.m.	2.6%
Unemployment rate (annual avg CMA)	7.8%	2.6%	86.5	2.8%	6.1%	6.6% (1999)	4.9%	7.0%	6.1%
Value of building permits (\$ millions)	808	1,738	658	504	2,418	1,001 (1999)	370	2,068	1,139
RESPONSIBILITIES									
Social welfare (muni/province)	no	ou	Ou .	ou	20%/80%	20% /80%	20% /80%	20% /80%	20% /80%
Social housing	ou	yes	yes	yes (some)	yes	yes	yes	yes	yes
Water works	yes	yes	yes(5)	yes	yes	yes	yes	yes	yes
Sewerage & solid waste	yes (3)	yes	yes	yes	yes	yes	yes	yes	yes
Electric system	ou	yes (4)	yes (5)	yes	yes	yes(6)	yes (6)	yes (6)	yes (6)
Public transit	no (3)	ves	yes	yes	yes	yes	yes	ves	ves

rugine transit.

(1) Net direct tax-supported debt includes debt issued and funded directly by the municipality. It is net of sinking fund assets and internally held debt, and excludes self-supporting debt

(2) Contingent liab. and long-term commitments include debt of overlapping authorities and debt for which the municipality is jointly liable, unfunded pension liabilities, and employee benefit obligations.

(3) Some funding derived from property taxes levied by City on behalf of TransLink (regional transport authority in charge of transit and major secondary roads since 1999).

Responsible for City sewer and water systems. Funds are also transferred to GVSDD for other sewerage services. (4) Prior to 1998, was consolidated in Calgary's financial statements. Now recorded on a modified equity basis.

(5) Prior to 1996, was consolidated in Edmonton's financial statements. Now recorded on a modified equity basis.

(6) Not included in Ontario municipalities! financial statements for years prior to 1999.

n.m.: not meaningful due to change in methodology for taxable assessment

ATTACHMENT 5

The City of Calgary Debt Servicing Ratio Calculation (Net Debt Servicing as a % of Operating Expenditures (net of recoveries))

Formula: Debt Servicing Ratio = Net Debt Servicing<1> /Operating Expenditure (net of recoveries)<2>

<1> Net [Debt Servicing Total Gross Debt Servicing Charges for Tax-supported Business Units	2002 Budget (\$ 000's) 118,404
Less:	Self-supported Debt Servicing Charges in Tax-supported Business Units	
	- Fleet	(3,082)
	- Red Light Camera	(303)
	- Golf Course	(749)
	- Mausoleum	(754)
	- Animal Shelter	(211)
	- Public Housing/Convention Centre Commercial Space	(3,236)
	- Promoting Calgary Inc. (as in budget)	(2,753)
	Add: Tax-sup[ported MPR for Convention Centre	991
Less:	Interest Subsidy	(3,892)
Less:	Local Improvement Levies	(6,405)
	Net Debt Servcing	98,010
<2> Oper	ating Expenditure (net of recoveries)	
<u> </u>	Gross Operating Expenditure (Net of Recoveries, including Fleet recoveries)	1,197,012
Less:	Recoveries of Self-supported Debt Servicing Charges in Tax-supported Business U	
	- Red Light Camera	(303)
	- Golf Course	(749)
	- Mausoleum	(754)
	- Animal Shelter	(211)
	- Public Housing/Convention Centre Commercial Space	(3,236)
	- Promoting Calgary Inc. (as in budget)	(2,753)
	Add: Tax-sup[ported MPR for Convention Centre	991
Less:	Interest Subsidy	(3,892)
Less:	Local Improvement Levies	(6,405)
2000.	Operating Expenditure (net of recoveries)	1,179,700
Debt Serv	vicing Ratio: <1>/<2>	8.3%
2001 301		3.370

Attachment 6 (a)

Debt Servicing As % Of Gross Expenditure (Net of Recoveries) Not Exceeding 10% Borrowings Based On 20-year Regular Amortization (6.25% interest rate) Maximum Tax-Supported Borrowing Capacity The City of Calgary

					Port Not Req	Portion of Additional Capacity Not Requiring Additional Tax Increase	Capacity Tax Increase		Rem	Remaining Capacity
	Maximum Additional Borrowing	ing	Debt	Debt Per	Borrowing	Debt Servicing	Debt		(may be set in tax ir leverage	(may be supported by tax increase, leverage of PAYG,
Year	Capacity *	Ratio **	Outstanding	Capita ***	Capacity *	Ratio **	Outstanding	Capita ***	Operatin	Operating Initiatives)
2002		8.73%	592,750	661	70,000	8.53%	512,750	572		80,000
2003	•	9.52%	733,694	804	20,000	8.81%	575,811	631		80,000
2004		9.74%	824,287	890	20,000	8.65%	640,770	692		30,000
2005		%96.6	907,847	961	20,000	8.73%	699,764	740		30,000
2006	100,000	%86'6	987,020	1,025	20,000	8.61%	755,503	784		30,000
2007		9.64%	1,042,815	1,067	000'09	8.11%	779,069	762		40,000
2008		9.46%	1,072,817	1,081	000'09	7.77%	778,385	784		40,000
2009		9.54%	1,105,007	1,097	000'09	%89.7	781,531	922		40,000
2010		%00'6	1,180,956	1,155	000'09	%06'9	790,179	773		80,000
2011	140,000	9.04%	1,251,396	1,206	000'09	6.61%	796,228	292		80,000
2012	`	%02'6	1,309,590	1,243	000'09	%26.9	793,125	753		80,000
2013	_	%26'6	1,350,346	1,263	000'09	%86.9	785,869	735		20,000
2014	_	%86.6	1,387,221	1,278	000'09	%92'9	777,957	717		70,000
2015	130,000	9.93%	1,420,960	1,290	000'09	6.51%	770,339	669		70,000
2016	`	%08'6	1,473,483	1,318	000'09	6.15%	765,147	684		90,000
2017	`	%69.6	1,526,224	1,345	000'09	2.70%	764,573	674		90,000
2018		%09'6	1,576,075	1,368	000'09	5.44%	765,784	999		90,000
2019		9.74%	1,619,308	1,385	000'09	2.35%	765,342	655		90,000
2020		9.84%	1,655,700	1,395	20,000	5.27%	773,337	652		80,000
2021		%06'6	1,685,565	1,400	20,000	5.19%	780,146	648		80,000
2022		%86'6	1,707,958	1,397	20,000	5.13%	785,160	642		80,000
2023		9.74%	1,782,514	1,437	20,000	4.95%	791,250	638		130,000
2024			1,857,281	1,475	20,000	4.81%	797,721	633		130,000
2025			1,927,825	1,508	20,000	4.68%	804,597	629		130,000
2026		6.75%	1,993,882	1,537	20,000	4.55%	811,902	929		130,000
2027	.,	%82'6	2,055,172	1,561	20,000	4.42%	819,664	622		130,000
2028	•	%08'6	2,111,395	1,580	20,000	4.33%	827,021	619		130,000
2029	•	9.85%	2,162,237	1,594	20,000	4.24%	833,949	615		130,000
2030	200,000	9.82%	2,207,359	1,603	70,000	4.15%	840,419	610		130,000

* assumed mid-year borrowing

^{** 2002-2006} based on projected financing available (not projected expenditure); projected 3% annual expenditure increases starting in 2007
*** 2002-2006 based on population projected by Corporate Economics; projected 1.5% annual population growth starting in 2007

Attachment 6 (b)

Tax-Supported Borrowing Capacity Not Requiring Additional Tax Increase Debt Servicing As % Of Gross Expenditure (Net of Recoveries) Not Exceeding 10% Borrowings Based On 20-year Regular Amortization (6.25% interest rate) The City of Calgary

			Servicing	Servicing Additional Borrowings		
				Operatir	Operating Initiatives Reserve	
		100% Major Project				
	Additional Borrowing	Reserve (Funding Principal	Tax Levy Reserve (Funding Interest	Amount Used to Fund Interest	Remaining Operating Initiatives	
Year	Amount	Payment)	Payment)	Payment Shortfall	Reserve	% Used
2002	000.07	5.036	1	•	ı	
2003	000'02	3,939	4,375		•	
2004	70,000	5,792		8,798	5,552	%0.89
2005	70,000	7,033	889	11,882	7,004	%0.89
2006	70,000	11,591	22	16,754	9,296	68.0%
2007	000'09	14,244		21,276	11,424	%0.89
2008	000'09	16,778		25,594	13,456	%0.89
2009	000'09	18,733		28,926	15,024	%0.89
2010	000'09	21,686		33,958	17,392	%0.89
2011	000'09	22,504		35,352	18,048	%0.89
2012	000'09	29,311		37,352	18,048	%0.89
2013	000'09	30,794		37,352	18,048	%0.89
2014	000'09	34,306	1,678	37,352	18,048	%0.89
2015	000'09	35,306	2,586	38,352	18,048	%0.89
2016	000'09	35,363	4,280	38,352	18,048	%0.89
2017	000'09	35,532	5,746	38,352	18,048	%0.89
2018	000'09	44,556	0,69	38,352	18,048	%0.89
2019	000'09	44,556	7,937	38,352	18,048	%0.89
2020	20,000	48,504	8,630	38,352	18,048	%0.89
2021	20,000	20,760	6496	38,352	18,048	%0.89
2022	20,000	56,400	10,362	38,352	18,048	%0.89
2023	20,000	56,400	10,720	38,352	18,048	%0.89
2024	70,000	56,400	11,101	38,352	18,048	%0.89
2025	20,000	56,400	11,506	38,352	18,048	%0.89
2026	20000	56,400	11,935	38,352	18,048	%0.89
2027	20,000	56,400	12,392	38,352	18,048	%0.89
2028	20,000	56,400	12,877	38,352	18,048	%0.89
2029	20,000	56,400	13,337	38,352	18,048	%0.89
2030	70,000	56,400	13,770	38,352	18,048	68.0%

Attachment 7

Capital Financing Reports Containing Policies in Effect as of 2002 January

- TTP99-65 Calgary Transportation Infrastructure Investment Plan Recommended Project 1998-2007
- C98-16 Transportation Capital Budget Financing
- C96-15 Capital Budget Financing
- C96-14 Update of the 10 Year Capital Spending Framework
- FB96-82 Debt Policy: Credit Rating Financial Ratios
- FB94-132 1995/1999 Capital Budget: Capital Financing Envelope (CFE)
- C89-16 Re: Financial Implications of Modified Debt Policies for Tax Supported Budget Program
- Financial Planning Task Force Report (1988 Oct. 20), Section V. <u>Controlling</u>
 <u>Expenditures</u>
- C85-66 Proposed Debt Policy

- 7. A 1998 property tax increase of 2% [changed to 1.7% at Budget Finalization] be put in place to fund Transportation infrastructure capital financing needs and remain in place until future Councils have an opportunity to examine options whereby the Debt Charge Savings could replace all or a portion of this increase.
- 8. A Transportation Capital Financing Reserve be established into which these tax revenues would flow, and from which the debt interest charges would be paid, and that investment income be allocated to that Reserve.
- 10. That the trend in debt reduction continue on a downward slope." (adopted as amended)
- C96-15 "5. the deferral practice be phased out such that, for 2001 2005 Envelope, annual capital budget appropriations will be limited to the annual Envelope funding available;
 - 7. 50% of the annual operating budget reductions resulting from debt retirement, after the contribution to the Capital Financing Envelope, be allocated to a Major Capital Project Equity Contribution Fund that would be used to provide an equity component for major projects;
 - 8. the balance of the annual operating budget reductions resulting from debt retirement be retained for Operating Budget purposes." (adopted as amended)
- C96-14 "1. Establish a Capital Financing Envelope that would:
 - Be set at \$276 million for 1996 2000;
 - Review bi-annually to compensate for the effects of general inflation and population growth; and
 - Be reviewed bi-annually for affordability." (adopted as amended)
- FB96-82 "1. That the following financial ratios be used by The City to measure its debt load:
 - (1) a. Total debt as a percentage of total operating revenue (including utilities);
 - b. Total debt per capita.
 - (2) a. Tax-supported debt service costs (principal and interest) as a percentage of operating revenue (excluding utilities);
 - b. Tax-supported debt as a percentage of operating revenue (excluding utilities);
 - c. Tax-supported debt per capita.
 - (3) a. Own-sourced financing as percentage of total capital expenditures;
 - 2. That the calculation methodology can be changed to reflect that used by the rating agencies.
 - 3. That the target for the tax-supported debt service as a percentage of operating revenue be set not to exceed 10%." (adopted as amended)

- FB94-132 "3. That reapproval of appropriations, whether they are "carried forward" appropriations or appropriations for projects that span more than one year, be discontinued, commencing with the 1996 Capital Budget" (adopted)
- Financial "6. That Council annually determine and set a five-year capital budget Planning envelope and ideally break such an envelope down to its annual equivalents so Task Force as to avoid "front end loading".
- 1988 Oct. 20 11. That the pay-as-you-go contribution be fixed at \$19 million in 1988 and would thereafter increase by \$0.5 million annually until 1994. Effective 1995, the pay-as-you-go will increase by \$2.5 million per year.
 - 13. That pay-as-you-go contribution be first applied to finance capital projects with a life expectancy of five year or less (this type of project tends to appear in this budget every year as opposed to major projects which incur infrequently) and any remaining amount will be used to reduce long-term borrowing which would otherwise be raised through debentures (thus reducing those borrowings which have the highest interest rates." (adopted)
- C89-16 "1. Capital assets funded by AMFC regulations stipulating a maximum term of ten years will continue to be reduced to a five year term for borrowing purposes." (adopted)
- "... financing ... for local improvements ... could have a term up to fifteen (15) years." (adopted) [Exceptions have been made where individual taxpayers or a corporation wanted more costly work with a longer asset life done but found the payments for a 15-year amortization too high. In these cases, terms of 20 and 25 years have been approved.]
- 1985 Jan. "As a general policy, borrowing in foreign currencies should not be actively considered. If, in the opinion of the Finance Department and its fiscal agent, the cost of funds in the domestic (including AMFC, Canadian and Euro-Canadian markets) is relatively unreasonable and/or an unusually large exchange rate differential from the norm occurs, then the policy would be opened for further consideration."
- 1985 Jan. "A program for potential open market borrowing be put in place and be kept up-to-date.
- 1972 Nov. "Debenture Funds should be borrowed from whatever source provides the least cost to the City."
- 1972 Nov. "Council authorize the engagement of a Fiscal Agent for the City, subject to the future ratification by Council of the choice of Agent and his contract for service to the City."