For Information Only

Roads/Debt Financing

Presented To:	Finance and Administration Committee
Presented:	Tuesday, Aug 09, 2016
Report Date	Thursday, Jul 21, 2016
Type:	Managers' Reports

Resolution

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Please refer to attachments for full report.

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Background

At the March 30th Finance and Administration Committee meeting, a report was requested that would outline the priority roads capital projects that could be undertaken using debt financing. Additionally, the report was to demonstrate where financing has been secured and provide a broader look at how debt financing would accelerate the City's road program.

Debt Financing of Roads Projects

Staff concurs that some roads projects can be funded by debt in accordance with the City's Debt Management Policy. The Debt Management Policy, which is attached as appendix "A", outlines several principles that should be present when debt financing is being contemplated for a project. They are:

- New, non-recurring infrastructure requirements
- Programs and facilities which are self supporting, and
- Projects where the cost of deferring expenditures exceeds debt servicing costs

The latter bullet is particularly relevant to the case for roads projects. Circumstances that apply to financing a roads project with debt under this principle include but are not limited to the following:

a) Expected inflation that exceeds the prevailing interest rate on debt.

b) Costs of risk and liability can be avoided or eliminated.

c) Avoidance of maintenance costs on an increasingly deteriorating asset.

Additionally, there are some qualitative benefits to the community that a new asset will yield. Such benefits could include increased active transportation infrastructure (cycling lanes), reduced congestion/travel time, enhanced business environment, and less wear and tear on vehicles.

Roads Program

The City's roads are managed in three broad categories. These three groups are arterial, collector and local roads. Roads are slotted into one of these categories based on number of lanes, traffic volumes, speed and other considerations. Chart 1 below outlines the category and the lane kilometers of each category within the City of Greater Sudbury's road network.

CHART 1				
Category	**Characteristics**	**Example**	**Lane kilometres**	**% of Total Road Network**
Arterial Roads	• Moderate to high traffic volumes • Medium to high speed • Two to six lanes • Limited to no on-street parking • Limited or controlled direct access	Paris Street Falconbridge Road Barry Downe Road	741	20.8%
Collector Roads	• Low to moderate traffic volumes • Medium speed • Two to four lanes • Controlled on-street parking • Direct access (normally controlled)	Errington St. (Chelmsford) Southview Drive Auger Avenue	616	17.3%
Local Roads	• Low traffic volumes • Low speed • Two lanes • On-street parking • Uncontrolled direct access	Baker Street Laura Avenue Michael Street	2,204	61.9%
Total			**3,561**	**100%**

Roads are further delineated by the state or condition of a road. Since 2000, the City of Greater Sudbury has defined the condition of a road using the Pavement Condition Index (P.C.I.), which ranks roads based on four factors – structural cracking, non-structural cracking, rutting and roughness. Chart 2 below depicts that P.C.I. scoring methodology.

CHART 2		
Category	**PCI Score**	**Description**
Excellent	85-100	Sound pavement with few defects perceived by drivers
Good	60-84	Slight rutting/cracking/roughness that is noticeable to drivers
Fair	40-59	Multiple cracks and/or rutting and/or roughness are apparent that may necessitate drivers to make minor steering adjustments
Poor	25-39	Significant cracks and/or rutting that pulls at the vehicle and/or roughness is uncomfortable for occupants. Drivers may need to correct to avoid defects
Very Poor	0-24	Significant cracks with potholes and/or rutting that pulls at the vehicle and/or roughness that is uncomfortable for occupants. Drivers will need to correct to avoid defects.

Financial Planning for Roads

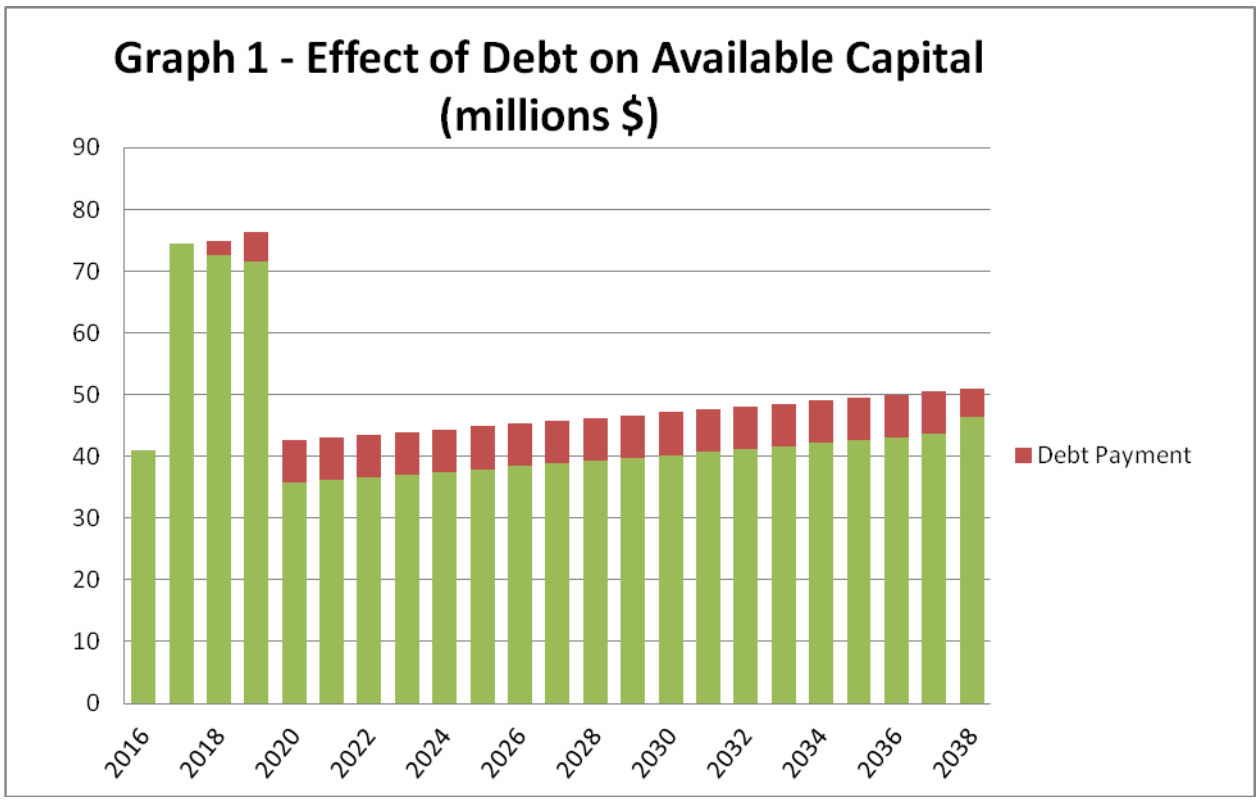
In 2012, KPMG completed a financial plan for Roads. The plan assessed the City's road network using the PCI data for the complete 3,600 lane kilometers of roadway throughout the city.

This assessment of the City's roads indicated that approximately 54% of the lane kilometers are in a good or above condition, whereas 38% is in fair condition and the remaining 8% is in poor or less condition. Categorically, arterial roads were in the best condition and received the most attention due to the high traffic volumes, speed and in an attempt to avoid the risk that these conditions present. Conversely, lower risk roads such as collectors and local roads have not received as much attention and are typically in a lower PCI category. These values will have declined over the 4 years since this study was performed, as investments in roads have not been to the level that the plan envisioned.

In order to address the capital and operational requirements, the plan recommended capital expenditures increase from the 2012 amount of $35 million to $75 million and an additional $4 million for summer maintenance. If the plan was implemented it was expected that the average life cycle of a road would decrease accordingly from 80 years to approximately 40 years. The plan is attached as Appendix "B".

Debt Financing and effect on City's Roads Program

As indicated in the report dated March 14th, 2016 from the Acting Chief Financial Officer/City Treasurer, the City of Greater Sudbury has considerable capacity to absorb debt. This same report indicates that $100 Million in debt can be supported with an approximate $6.9M debt payment. Financing the debt payment directly from the roads and drainage capital budget of approximately $41M would yield a large spike in funding upon receipt of the debt, followed by a smaller pool of available capital funds. Graph 1 below depicts the borrowing of $100M over 3 years and the corresponding debt repayment. As can be seen the capital available for projects will decrease by the amount of the debt payment. For example in 2020, the total Capital budget will be approximately $42M (assuming inflationary increases), yet the funds available for capital projects will only be approximately $35M as the $6.9M debt payment is absorbed into the budget.



This reduction in available capital will have a negative longer term effect as the pavement condition on the road network continues to decline without funding to mitigate this.

Delivery of a Debt Financed Capital Roads Program

As alluded to in Graph 1, the delivery of an additional $100M in capital projects will not be achievable in one year. The delivery of a program of this magnitude will have to be completed over a number of years. Additionally, resources to support this size of capital program such as project management, design and inspection will need to be acquired for the term implementation. Typically, costs associated with capital project delivery amount to 10-20% of total capital costs. This is dependent on the complexity of the project undertaken.

An example of a type of program that $100M could produce would be similar to the following:

Project	**Cost (millions $)**
MR 35 four lanes	$28.5
St.Annes Ring Road	$28.5
Lorne Street Reconstruction	$34.5
Local Roads	$8.5
Total	**$100**

*estimates will be updated prior to budget approval

The above represents an example of a program that encompasses a variety of road types. Included are arterial roads (MR 35 four lanes, Lorne reconstruction), a growth project for a collector road (St. Annes Ring Road) and local roads. Costs for project design, management and inspection have been included in these costs.

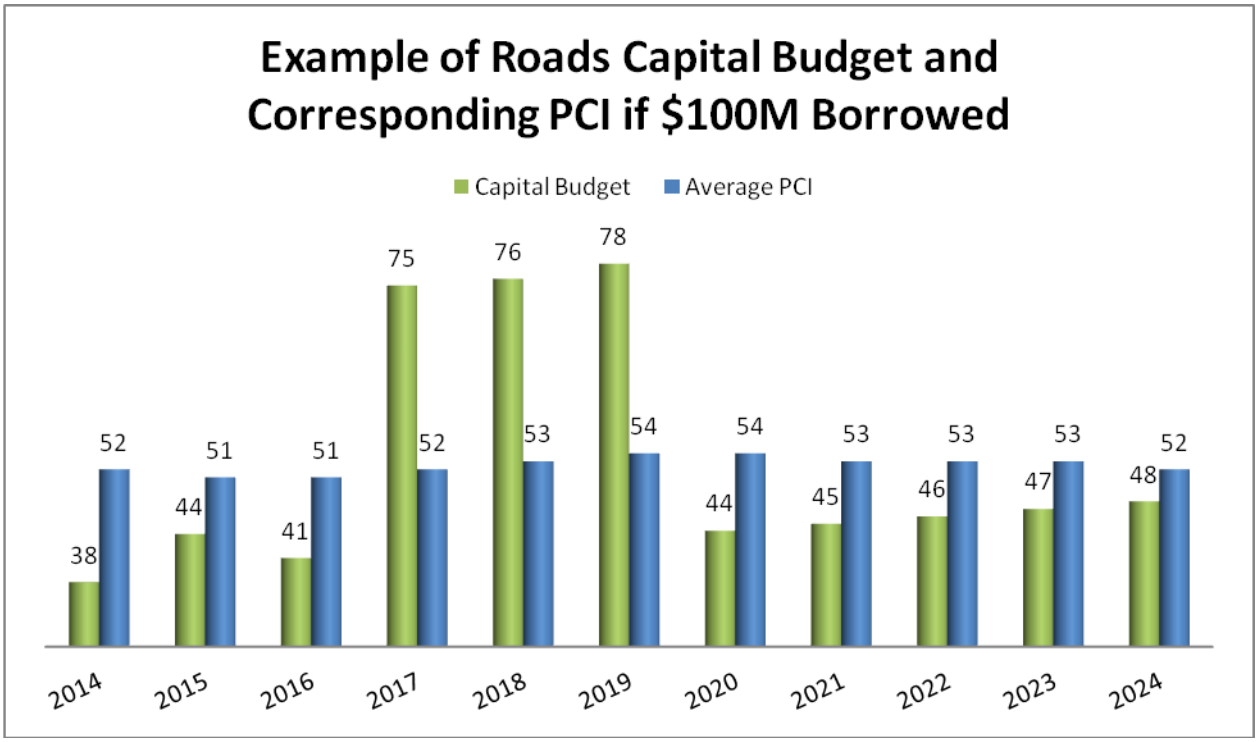
Priority Capital Projects

Each year staff prepares the capital budget for Council approval. There is also an additional four years worth of projects outlined for planning purposes. These projects outlined in the capital budget and planning period are deemed to be the priority projects based on a positive cost/benefit analysis. These projects are listed in appendix “C” attached.

Graph 2 below, was created to provide Council with an understanding of the effect of a $100M injection would have on the road network. Specifically it depicts the effect of the $100M as it relates to the P.C.I. of the City of Greater Sudbury’s road network. Graph 2 is for illustrative purpose and could change slightly depending on the types of projects and costs per lane kilometer incurred to complete them. In general terms the PCI would see an immediate increase as road construction is completed. This would be in the range of approximately 2-3 points. Subsequent to completion and a return to normalized

funding levels, the P.C.I. of the road network would decline and would continue on that downhill path until the next injection of large capital dollars.

GRAPH 2



Conclusion

The City has the financial capacity to absorb further debt financing. The City's Debt Management Policy (appendix "A") articulates several key principles required in order to apply debt financing to a project. Road reconstruction/rehabilitation projects are consistent with the principles outlined in the Debt Management Policy and would be suitable candidates for debt financing.

Debt financing of roads projects will provide a short term increase in the pavement condition index of the City's road network. However, long term sustainability of the road network requires adequate and consistent funding levels. The Roads Financial Plan as developed by KPMG is attached as appendix "B" and provides insight into the funding requirements for the road network.

Priority road projects are attached as appendix “C” and are the culmination of the identified projects from 2017-2020 outlook as presented in the 2016 capital budget. These recommendations are based on a cost/benefit analysis and are deemed to be the most advantageous projects for the well being of the road network given the current funding environment.

THE CITY OF GREATER SUDBURY
POLICIES AND PROCEDURES

DEPARTMENTS: All Departments

SECTION: All Sections **TITLE:** Debt Management Policy

APPROVED BY: City Council **DATE:** October 8, 2013

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Purpose

The purpose of the Debt Management Policy is to set out the parameters for securing debt, managing outstanding debt and provides guidance regarding the timing of debt, type of debt instrument and the purpose for which the debt will be used.

Policy Statement

- Debt is an ongoing component of the City's capital financing structure and should be coordinated with the City's long-term plans and strategies
- Debt must be affordable and sustainable
- Debt should be structured in an equitable manner to those who pay should benefit from the asset
- Issuing or securing new debt should be only approved by Council
- Debt must be managed, monitored and reported upon

1.0 Principles of Debt Financing

The City's Capital Policy By-law 2012-119 states:

In accordance with the Long Term Financial Plan (L TFP), more specifically, Principle #7 "use debt financing where appropriate", any internal or external debt financing must be approved by Council, and should only be considered for:

- new, non-recurring infrastructure requirements
- programs and facilities which are self-supporting, and
- projects where the cost of deferring expenditures exceeds debt servicing costs

The LTFP also stated that Council should:

- Consider undertaking a short-term, managed program of debt financing to address the City's current infrastructure deficiency and to reduce further deterioration of the City's infrastructure
- Issue or secure debt for terms no longer than the anticipated life of the funded assets

Reductions in External Debt Repayments

The LTFP also recommends: "As debt charges decline due to retirement of debt, apply savings to accelerate achievement of full life cycle costing for City infrastructure."
When preparing the annual budget, any decrease in annual debt repayments shall be offset by a corresponding increase in the contribution to the respective Capital Envelope. This allows the envelopes to increase while having no impact on the operating budget.

2.0 Debt Approval

2.1 The Capital Policy By-law #2012-119 also provides guidance regarding debt approval.

Finance Approval for Debt Financing

If a capital project is identified that meets the above noted criteria for debt financing, an application should be made by the SMT member to the Chief Financial Officer.

The Financial Planning and Policy Section will determine if it is in the City's best interest to finance the project internally or externally.

Council approval is required for either internal or external debt financing.

Internal Debt Financing

From time to time, a capital project may require internal debt financing, with repayments to come from future capital envelopes or other sources over time. If the term of the repayment exceeds two years, then interest will be charged.

Any internal financing recommended to Council will be in accordance with the City's Investment Policy, which states that interest will be charged at one percent above the average investment rate locked in at the time the internal financing is approved. Finance will provide interest rates and amortization schedules for each project with internal debt financing.

2.2 A multi year debt service funding strategies consistent with the capital planning and budget cycle will be developed. Capital projects requiring debt financing should be identified during the budget process.

3.0 Debt Categories

To facilitate debt planning, management and reporting, debt is categorized into two groups based on the funding source for the debt servicing:

1. Tax Supported Debt – the debt repayment source would be the tax levy

2. Self Supporting Debt – the debt repayment source would be outside the tax levy – such as user fees or development charges. Such projects would include but not limited to water/wastewater projects, parking lot improvements, growth related projects, arena projects where other revenues would provide for all operating costs and debt servicing costs

4.0 Debt Limits

The municipal debt limits based on debt servicing costs are:

5% of Net Revenues or Own Purpose Revenues (as identified in the Ministry's Annual Repayment Limits). This refers to the total revenue the municipality receives and it is discounted for items such as the Ontario and Canada grants, deferred revenue earned and gain/loss on sale of land and capital assets.

5.0 Debt Instruments

The following are guidelines for the City:

- Issue an RFP to secure the best interest rates and terms available
- Obtain a credit rating from one of the rating services if it would assist in reducing the interest rate significantly, and the benefits outweigh the costs
- Make application and secure debt from Infrastructure Ontario if rates are lower than through the RFP process, and the terms are more favourable
- Use of debentures should be considered if bank rates or Infrastructure Ontario rates are not appealing
- Acquisition of financing through a Private Public Partnership (P3) must be approved by Council
- Before entering into a Capital Lease, it must be in accordance with Bylaw 2003-213
- Make use of Municipal Swaps when available to reduce interest costs

6.0 Debt Amortization Term

Debt term shall not exceed the probable life of the asset. If the debt term is less than the life of the asset and affordable, this would be recommended with the view of minimizing long term financing costs. (Municipal Act cannot exceed forty years).

Minimizing costs will be balanced against being fair and equitable to taxpayers that pay and benefit from the underlying assets over time.

7.0 Reporting and Monitoring

Staff will monitor this regularly and at a minimum report annually against the limits and guidelines identified in Section 4.0.

Staff will also periodically review benchmark data from other municipalities.

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CITY OF GREATER SUDBURY

Financial Planning for Municipal Roads, Structures and Related Infrastructure

Final Report

July 10, 2012

Financial Planning for Roads

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Financial Planning for Roads
Executive Summary

With a total area of over 3,600 square kilometres, the City of Greater Sudbury (the "City") and its predecessor municipalities have invested heavily in the municipal road network and related infrastructure. Overall, the City maintains approximately 3,600 lane kilometres of roadways, the equivalent of a single lane highway connecting Greater Sudbury to the US-Mexican border at El Paso, Texas.

Total spending on the City's road network during 2012 (operating and capital) is expected to amount to $75 million, representing the largest single expense item for the City and accounting for 13% of the total municipal budget. The significance of the municipal road network is also demonstrated by the investment in the underlying infrastructure. With a historical cost of $1.1 billion and estimated replacement cost of $3.0 billion, the municipal road network represents the largest single asset class for the City.

With the implementation of accounting for tangible capital assets, municipalities, including the City, have a better understanding of the cost and investment requirements associated with their infrastructure, allowing for enhanced planning for the funding and rehabilitation of key infrastructure components. The City has already introduced sustainable capital asset management for its water and wastewater services, increasing the amount of capital funding in response to impending needs. This financial plan outlines a similar strategy for the City's road network.

Prepared in conjunction with staff from the City's Infrastructure and Financial Services Divisions, the financial plan for roads is intended to address a growing infrastructure and operational deficit, one that manifests itself through an increasing deterioration of the City's road network. In 2012, the City will spend approximately $35 million on capital expenditures for roads, compared to the estimated $75 million that it is required to invest in order to maintain the road network at the recommended standard. The gap between actual and required spending has resulted in an immediate roads infrastructure deficit of approximately $700 million, with a further $570 million to be required on existing infrastructure over the next ten years. In addition, new infrastructure requirements arising from growth amount to a further $241 million.

The financial plan recognizes that the magnitude of the roads infrastructure deficit cannot be addressed in a short timeframe. Rather, the financial plan considers a ten year phase-in period during which the City will increase funding for capital purposes by $7 million per year each year to deal with the infrastructure shortfall, with an additional $4 million invested in summer roads maintenance over five years. The increase in financial resources contemplated under the financial plan will allow the City to reduce its maintenance cycle from the current 83 years to approximately 40 years, which is a much closer reflection of the useful life of the road network. While the City intends to continue its efforts to secure support from senior levels of government for reinvestment in its roads network, the financial plan anticipates that, in the absence of senior government assistance, the City would be required to increase the municipal levy by 3.3% to 3.5% each year over the next ten years to fund its operating and capital requirements associated with roads.

Financial Planning for Roads

Background to the Study

During 2011, the City completed a ten year financial plan for water and wastewater services. While the impetus for the plan was Provincial licensing requirements, it represented the continuation of the City's efforts to appropriately address its infrastructure issues for water and wastewater services, which began with the implementation of sustainable capital asset management for water and wastewater services in 2001.

The completion of the financial plan for water and wastewater services was made possible through the adoption of tangible capital asset accounting by the City, which reflected a change in accounting policies for Canadian municipalities. For the first time in many years, municipalities have a perspective on the historical cost of their underlying infrastructure which, when combined with other elements such as useful live and replacement values, form the basis for effective asset management, recognizing that effective asset management involves not only the acquisition of assets, but also their maintenance and eventual replacement.

In recognition of the value of long-term financial planning, as well as concerns over the sufficiency of funding for both operating and capital requirements associated with it's road network and related infrastructure (structures, signage, streetlights, storm sewers), the City has embarked on the preparation of a financial plan for the municipal road network and has retained KPMG to assist City staff with the development of the financial plan.

The financial plan outlined in this document is intended to assist Council and City staff to achieve a level of annual financing that will provide sustainability for the municipal road network. For the purposes of the financial plan, sustainability is defined as the condition whereby the level of financial resources allocated to roads is sufficient to provide for the recommended level of operational maintenance as well as the required capital reinvestment in the roads infrastructure.

It is important to recognize that the financial plan is simply that – a plan. It does not represent a binding multi-year budget and Council retains the authority and responsibility to establish budgets and tax rates on an annual basis, which may vary from those outlined in the financial plan.

In addition to this introductory section, the financial plan includes:

- An overview of the City's road network
- An analysis of historical and budgeted road expenditures (operating and capital)
- Observations concerning key challenges facing the City from a roads perspective
- An overview of the financial planning process, including key assumptions and outcomes

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CITY OF GREATER SUDBURY

Overview of the Municipal Road System

Overview of the Municipal Road System
Roads Categories

For the purposes of managing its road network, the City has categorized municipal roads into three groups – arterial, collector and local – based on traffic volumes, speeds and other considerations, with local roads representing the majority (62%) of all roads in Greater Sudbury. In addition, the City's road network is also classified by type of construction, with asphalt surfaced roads representing two-thirds of all roads infrastructure in the City (based on total lane kilometres[1]).

Category	Characteristics	Lane kilometres				% of Total Road Network	Examples
		Asphalt	Surface Treatment	Gravel	Total		
Arterial roads	• Moderate to high traffic volumes • Medium to high speed • Two to six lanes • Limited to no on-street parking • Limited or controlled direct access	741	–	–	741	20.8%	Paris Street Garson-Falconbridge Road Barry Downe Road
Collector roads	• Low to moderate traffic volumes • Medium speed • Two to four lanes • Controlled on-street parking • Direct access (normally controlled)	616	–	–	616	17.3%	Errington Street (Chelmsford) Southview Drive Auger Avenue
Local roads	• Low traffic volumes • Low speed • Two lanes • On-street parking • Uncontrolled direct access	985	601	618	2,204	61.9%	Baker Street Laura Avenue Michael Street
Total		2,342	601	618	3,561	100.0%	
Percentage of total		65.8%	16.9%	17.3%	100.0%		

[1] A lane kilometre refers to one kilometre of single lane roadway. One kilometre of two lane road represents two lane kilometres, while five kilometres of four lane road represents 20 lane kilometres (four lanes x five kilometres = 20 lane kilometres).

Assessing the Physical State of Greater Sudbury's Roads

Since 2000, the City has also classified its road network based on a Pavement Condition Index ("PCI"), which ranks roads based on four factors – structural cracking, non-structural cracking, rutting and roughness. Based on the PCI, roads can be assigned one of five rankings ranging from excellent to very poor, as noted below.

Category	PCI Score		Description
	Low	High	
Excellent	85	100	Sound pavement with few defects perceived by drivers
Good	60	85	Slight rutting and/or cracking and /or roughness that is noticeable to drivers
Fair	40	60	Multiple cracks are apparent and/or rutting may pull at the wheel and/or roughness necessitates drivers to make minor steering corrections
Poor	25	40	Significant cracks may cause potholes and/or rutting pulls at the vehicles and/or roughness is uncomfortable to occupants. Drivers may need to correct steering to avoid road defects.
Very poor	0	25	Significant cracks with potholes and/or rutting pulls at the vehicle and/or roughness is uncomfortable to occupants. Drivers will need to correct steering to avoid road defects.

Assessing the Physical State of Greater Sudbury's Roads (continued)

While PCI provides an indication as to the current condition of the municipal road network, it also provides a framework for prioritizing capital spending. Guidance provided by the Ontario Good Roads Association attempts to link PCI to the timing and nature of capital spending on roads, recognizing that municipalities will adopt their own standards.

	Arterial	Collector	Local
Road condition is adequate	PCI > 85	PCI > 80	PCI > 80
Improvement required within six to 10 years	PCI of 76 to 85	PCI of 71 to 80	PCI of 66 to 80
Improvement required within one to five years	PCI of 56 to 75	PCI of 51 to 70	PCI of 46 to 65
Immediate rehabilitation	PCI of 50 to 55	PCI of 45 to 50	PCI of 40 to 45
Immediate reconstruction	PCI < 50	PCI < 45	PCI < 40

The most recent PCI rankings indicate that just over half of the City's road network is in either excellent or good condition. However, arterial and collector roads are in generally better condition than local roads. Two-thirds of arterial and collector roads is ranked as excellent or good as compared to 42% of local roads. Overall, the average PCI for the City's road network is in the order of 65 for arterial and collector roads and 57 for local roads[1].

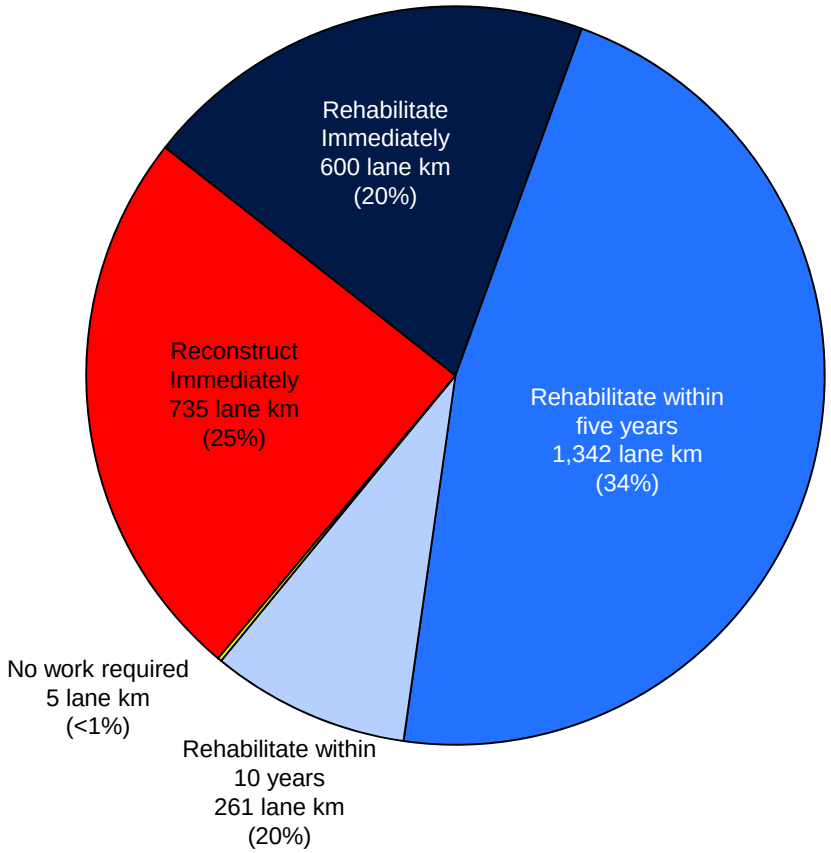
Category	PCI Index		Lane Kilometres				Percentage of Total
	From	To	Arterial	Collector	Local	Total	
Excellent	85	100	39	–	4	43	1.5%
Good	60	85	702	177	659	1,538	52.3%
Fair	40	60	–	399	729	1,128	38.3%
Poor	25	40	–	39	173	212	7.2%
Very poor	0	25	–	1	21	22	0.7%
Total – asphalt and surface treatment			741	616	1,586	2,943	100.0%
Gravel						618	
Total						3,561	

[1] Based on 2009 PCI data.

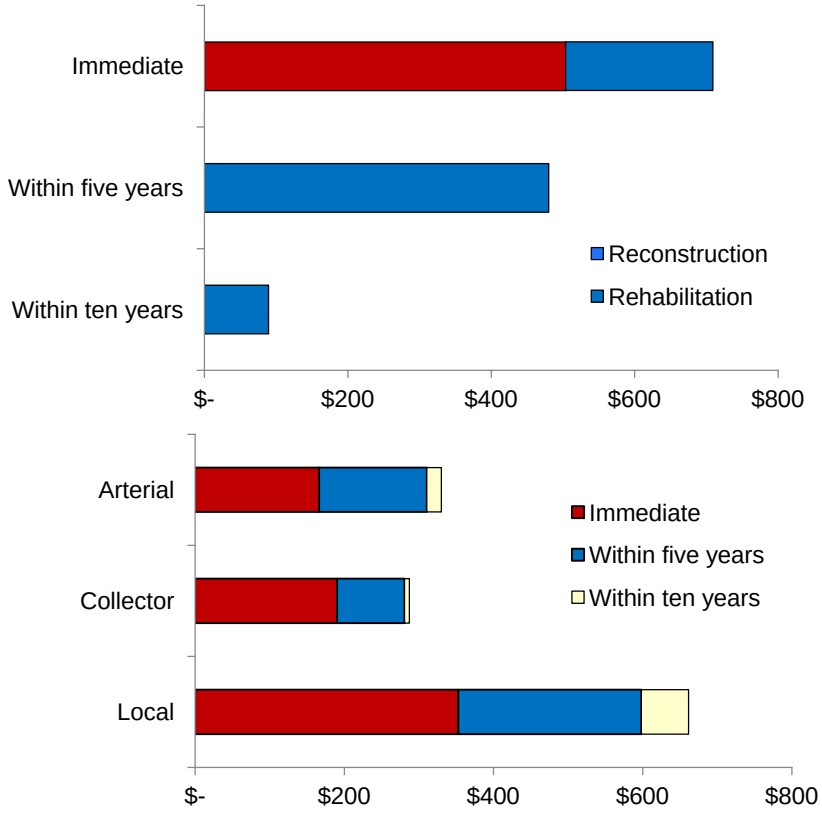
Assessing the Physical State of Greater Sudbury's Roads (continued)

Application of the guidance provided by the Ontario Good Roads Association to the City's municipal road network in 2009 identifies an immediate infrastructure deficit (representing roads that are considered to be in immediate need of rehabilitation or reconstruction) of approximately $700 million, with an additional $480 million and $90 million in capital reinvestment required over the next five years. While the City has invested significantly in road infrastructure since 2009, the magnitude of this infrastructure deficit likely has not changed significantly as the ongoing aging of roads continues to add to the investment requirement.

Calculated capital investment requirement in 2009 (in lane kilometres)



Calculated capital investment requirement in 2009 (in millions of dollars)



Road Expenditures and Funding

The 2012 municipal budget anticipates just under $75 million in spending on roads, comprised of $38 million in operating costs and $37 million in capital. Overall, road expenditures in 2012 are approximately 2.5% lower than the 2011 budgeted amounts, reflecting decreases in both operation and capital expenditures.

The municipal levy represents the largest source of funding for roads costs, amounted to over 80% of total revenues. Other funding sources for roads are primarily capital in nature and include Federal Gas Tax revenues, reserve contributions and advances from future years' capital envelopes.

Summary of roads expenditures and revenues[1]

(in thousands)	2011 Budget		2012 Budget	
	Amount	Percentage	Amount	Percentage
Winter roads maintenance	$15,294	20.0%	$15,298	20.5%
Summer roads maintenance	$14,522	19.0%	$14,036	18.8%
Other costs	$7,989	10.5%	$8,252	11.1%
Total operating expenditures	$37,805	49.5%	$37,586	50.4%
Capital expenditures	$38,619	50.5%	$36,957	49.6%
Total roads expenditures	$76,424	100.0%	$74,543	100.0%
Municipal levy – operating purposes	$36,555	47.8%	$36,740	49.3%
Municipal levy – capital purposes	$24,017	31.4%	$24,498	32.9%
Gas tax grants	$8,072	10.6%	$7,960	10.7%
Other capital revenues	$6,530	8.5%	$4,499	6.0%
Other operating revenues	$1,250	1.7%	$846	1.1%
Total revenues	$76,424	100.0%	$74,543	100.0%

[1] Budgeted information for 2012 does not include the announced $15 million contribution from Vale Canada Limited for the Municipal Road No. 4 capital project.

Capital Reinvestment

As part of its capital budgeting process, the City has prepared a multi-year outlook that forecasts capital spending over a five year period (2012 to 2016). While the City plans to continue investment in the municipal road network, including increasing capital fund envelopes by the non-residential construction rate of inflation, the total planned capital expenditures over the next five years ($172 million) represents only 7% of the calculated infrastructure requirements over the next five years for existing assets only ($2.5 billion).

In addition to its planned expenditures, the City has identified new road and drainage projects that are currently unfunded, meaning that sufficient financing has not been allocated to the projects. The cost of these unfunded capital projects is currently estimated to be in the order of $241 million. As these projects reflect new and not existing infrastructure, they are not included in the calculated infrastructure deficit.

Unfunded roads and drainage projects (2012 cost estimates)

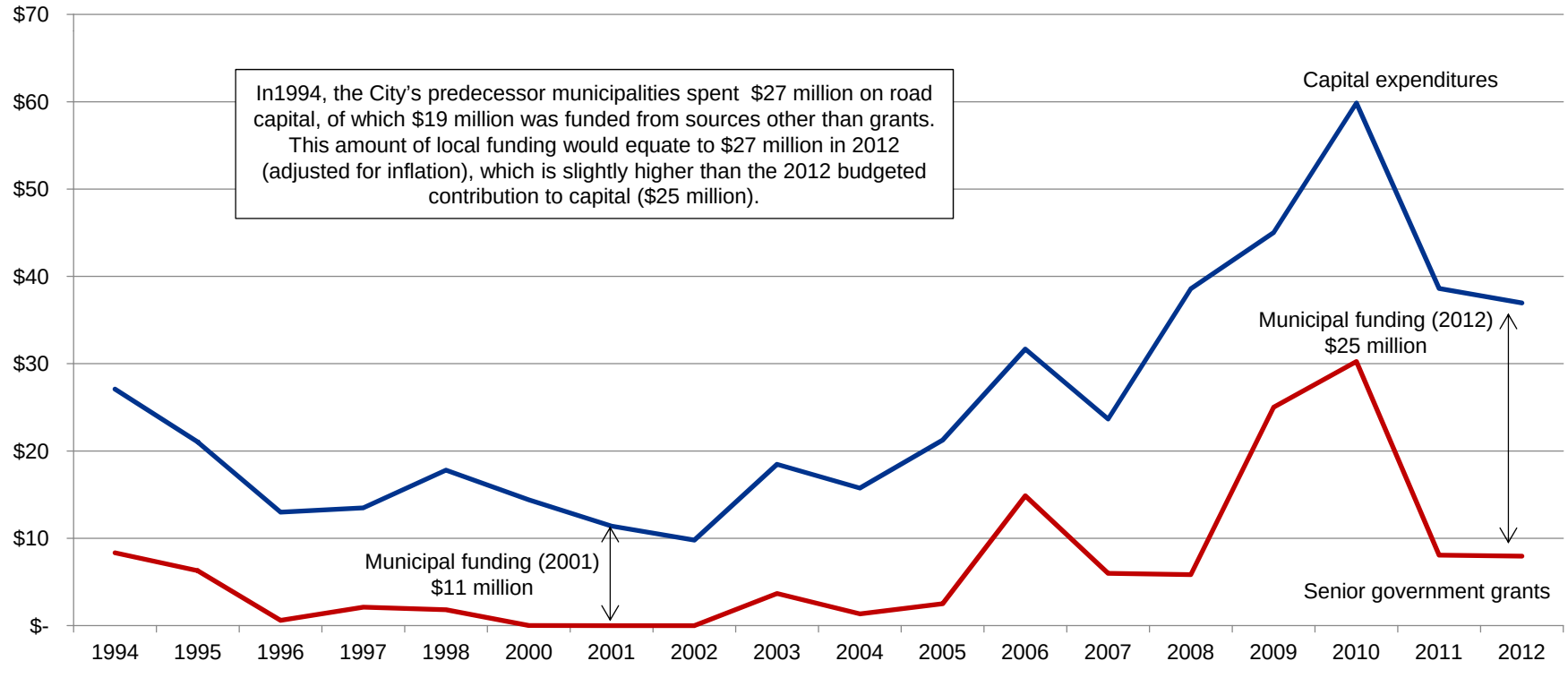
Project	Estimated Cost
A. Maley Drive Extension	
Total cost	$115 million
Identified funding for Maley Drive extension	$21 million
Maley Drive extension (unfunded component)	$94 million
B. Other Growth Related Projects	
Municipal Road 35 widening (Azilda to Chelmsford)	$29 million
Kingsway Boulevard realignment	$25 million
Construction of new University link road	$16 million
Notre Dame Avenue widening (Lasalle to Kathleen)	$16 million
Lake Ramsey drainage system improvements	$25 million
Junction Creek stormwater management	$10 million
Other projects (each $5 million or less)	$26 million
Other capital projects	$147 million
Total identified unfunded capital projects	$241 million

Overview of the Municipal Road System

Historical Capital Expenditures and Grants

Historically, the level of capital expenditures available for roads and related infrastructure has been significantly influenced by the availability of grants from senior levels of government. In 1994, the predecessor municipalities spent a total of $27 million on roads capital projects, including $8 million in grants from senior levels of government. With the incorporation of conditional roads grants into municipal support grants in 1998, capital-specific grants for roads decreased to nil, with a corresponding reduction in capital expenditures by municipalities due to other external influences and financial pressures. Since that time, the City has significantly increase in capital expenditures for roads, due in large part to the availability of stimulus funding as well as the additional capital financing generated by the City's capital levy, both of which reflect the importance of roads infrastructure. The City's contribution to roads capital in 2012 is budgeted to be $25 million, compared to $11 million in 2001.

Roads capital expenditures and grant revenues – City of Greater Sudbury and predecessor municipalities (in millions)



Overview of the Municipal Road System
Concerns and Challenges

As part of the financial planning process as well as other communications to Council, City staff have expressed concerns over the insufficiency of funding for the City's road network, both from an operational and capital perspective:

- Staff recommend that the City attempt to maintain an average PCI of 70 for arterial and collector roads, with an average PCI of 60 recommended for local roads. To achieve this standard, staff advised that total annual capital expenditures need to increase to $65 million for arterial, collector and local roads, with additional funding required for drainage, structures, streetlights, signage and other components of the road network. As noted below, the capital budget for 2012 provides approximately 38% of the recommended roads funding on an overall basis, with arterial and collector roads receiving a higher percentage of the recommended funding (54%) than local roads (18%).

	Budgeted Expenditures (2012)	Recommended Expenditures	Difference	Percentage of Recommended Expenditures Provided
Arterial and collector roads	$19.6 million	$36.0 million	$16.4 million	54.4%
Local roads	$5.1 million	$29.0 million	$23.9 million	17.6%
Total	$24.7 million	$65.0 million	$40.3 million	38.0%

- In November 2011, City staff prepared a Zero Based Budget analysis for summer roads maintenance programs which indicated that a total of $18.041 million would be required to staff's recommended standard of maintenance for roads, an increase of approximately $4.0 million above the 2012 budgeted expenditures. The majority of this increase results from three specific changes to service levels:
  - Increasing the amount of asphalt patching undertaken by contractors from 8,000 m^2 per year (representing 0.08% of the municipal road network) to 25,000 m^2 per year (0.24%) +$700,000
  - Decrease the cycle for gravel resurfacing from 80 years to 20 years +$800,000
  - Increasing the frequency of catchbasin and manhole repairs from a 29 year cycle to a 20 year cycle and cleaning from a six year cycle to a two year cycle +$1,000,000

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CITY OF GREATER SUDBURY

Financial Planning for the Municipal Road System

Key Assumptions

The financial plan for the City's road network considers a ten year planning period (2013 to 2022) and establishes as its starting point the City's 2012 budget (operating and capital). Recognizing the significance of future infrastructure investment requirements, the financial plan considers two scenarios:

- **Scenario 1** assumes that the City will adopt a sustainable capital asset management plan for roads whereby capital contributions will increase over a 10-year period until such time as the level of capital funding is sufficient to provide for sustainable reinvestment in road infrastructure. Additionally, this scenario assumes that the Maley Drive extension will be the only significant investment in growth-related infrastructure, with other growth-related projects deferred. The Maley Drive extension is forecasted to be funded through a combination of grants, capital fund contributions and debt financing, with the debt servicing cost reflected in the financial model.
- **Scenario 2** is based on the first scenario but assumes that additional growth infrastructure projects (with a total forecasted cost of $146 million) will also be undertaken by the City. These additional growth infrastructure projects are forecasted to be financed through a combination of grants and debt, with the debt servicing cost reflected in the financial model.

For both scenarios, the following assumptions have been considered:

- Operating costs have been increased by 3% annually, which reflects the assumed rate of inflation.
- Summer maintenance costs have been projected to increase by an additional amount to reflect a gradual increase in service levels consistent with those identified in the Zero Based Budget scenario prepared by staff. For the purpose of the financial plan, we have assumed that the service level increases will be phased-in over a five year period (2013 to 2017).
- Excluding inflationary increases, no adjustments (positive or negative) have been made to winter maintenance costs to reflect changing climatic conditions. To the extent that surpluses or deficits are experienced, it is assumed that the City will utilize its existing winter roads maintenance reserves to compensate for the budgetary variances.
- No changes in the method of allocating administrative costs or internal recoveries have been considered in the financial plan.
- Operating expenditures have not been adjusted to reflect the forecasted increases in capital spending, which will require additional resources for project management and other administrative responsibilities.

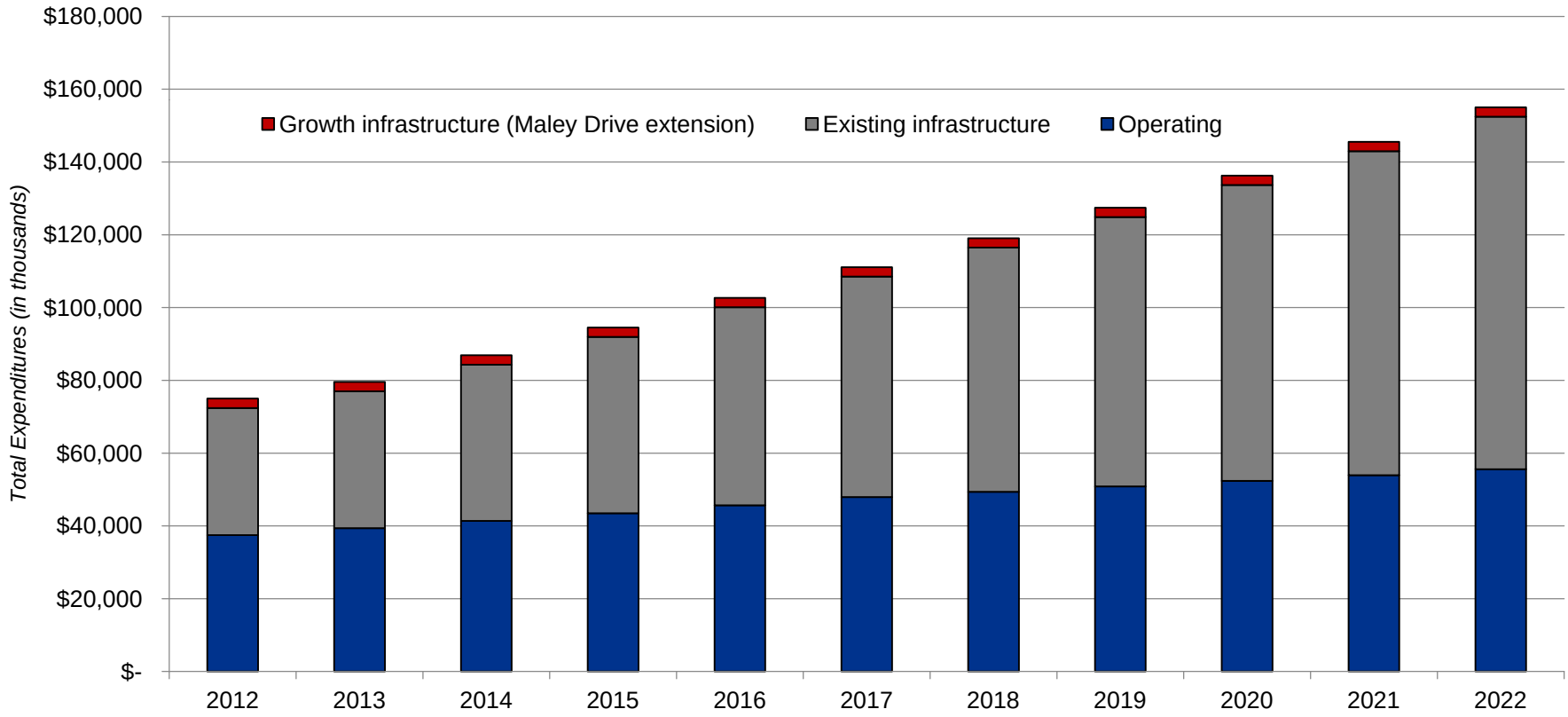
A summary of the financial plan is provided in the following pages, with detailed schedules included as appendices to this report.

Financial Planning for the Municipal Road System

Projected Road Costs – Scenario 1

The financial plan envisions operating costs increasing from $37 million in 2012 to $56 million in 2022, reflecting inflation and increases in service levels for summer roads maintenance. Capital spending on existing infrastructure is projected to increase from $35 million to $97 million, representing the required level of funding for sustainable capital maintenance. Capital spending for growth infrastructure represent the City's funding for the Maley Drive extension, comprised of debt servicing on the amounts borrowed to fund the City's local share of the project costs.

On an average annual basis, the increase in the overall municipal levy associated with this increase in roads expenditures (operating and capital) is 3.3% over the ten year planning period.

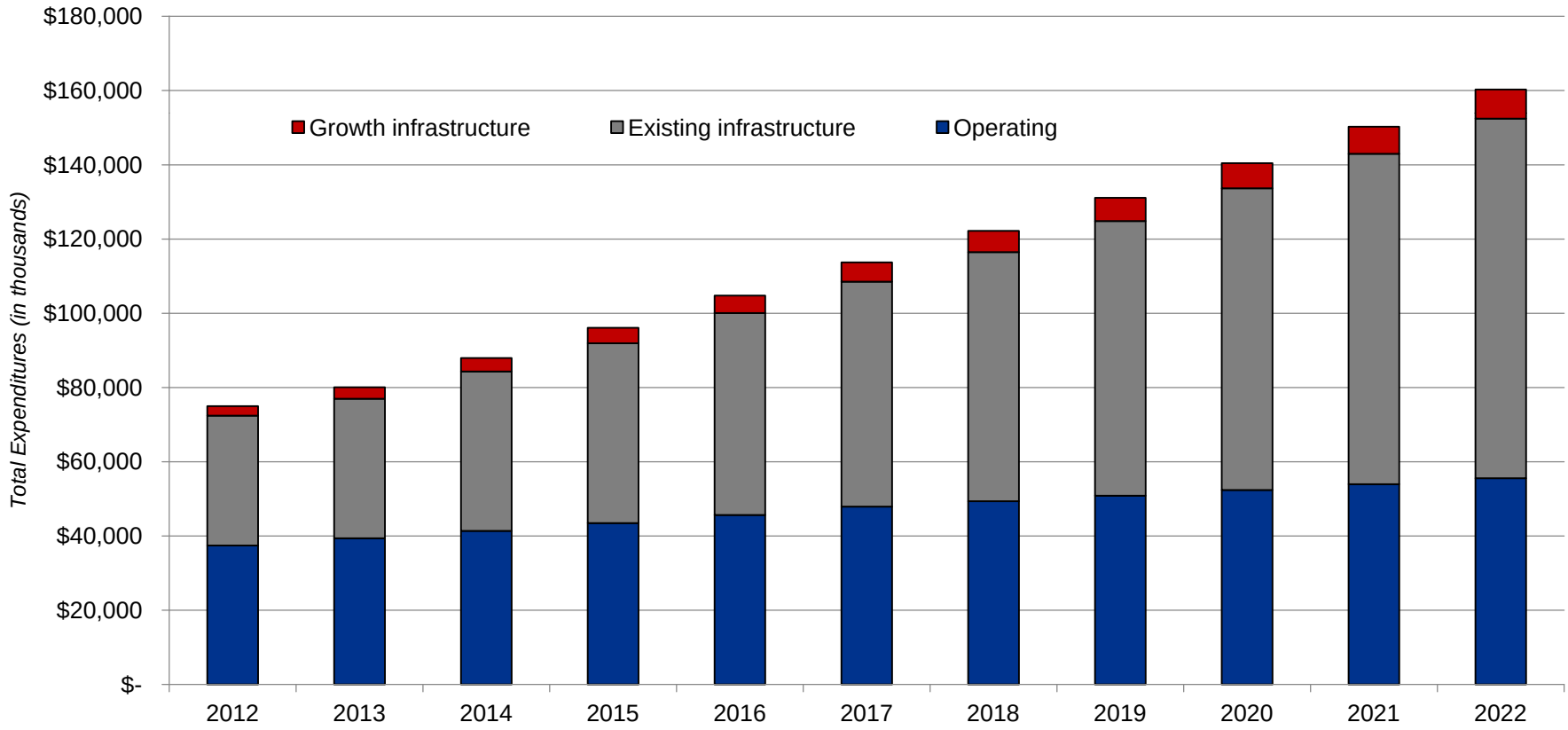


Financial Planning for the Municipal Road System

Projected Road Costs – Scenario 2

The second scenario reflects a higher level of funding for growth infrastructure, with additional growth-related projects undertaken during the planning period at a total cost of $147 million. For the purposes of the financial model, it is assumed that the City's share of these project costs (i.e. total costs less grants received) will be funded through debt, with the City required to fund ongoing debt servicing costs.

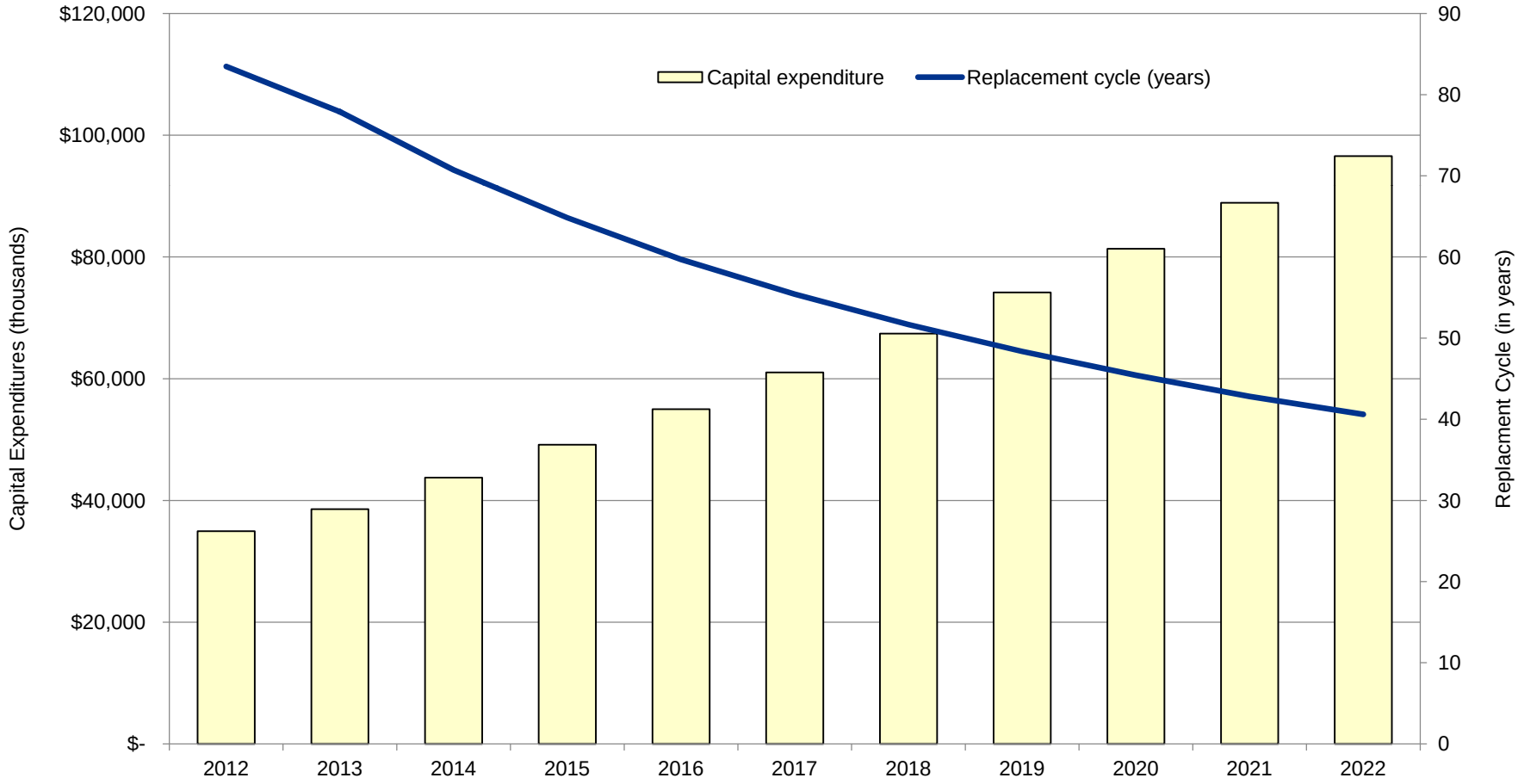
With the increased level of growth-related capital spending, the increase in the overall municipal levy associated with this scenario is 3.5% over the 10 year planning period, which is slightly higher than the forecasted increases in taxes under the first scenario (3.5%).



Financial Planning for Municipal Road System

Projected Capital Financing and Replacement Cycle

As the City's capital funding for its existing roads infrastructure increases by $7 million per year, the replacement cycle is expected to decrease accordingly. Currently, the City's capital funding is sufficient to reconstruct/rehabilitate a road once every 80 years. At the end of the financial planning period, the reconstruct/rehabilitate cycle for roads is expected to approximate 40 years, which is reflective of the average useful life of a road.



Financial Planning for the Municipal Road System
Concluding Comments

- Based on guidance from the Ontario Good Roads Association, the current infrastructure deficit for roads is estimated to be $700 million, with an additional $480 million to be invested within the next five years and a further $90 million within the next 10 years.
- Achieving a sustainable level of capital investment would require the City to increase its annual capital expenditures from the currently level of $35 million to $75 million. Based on a ten-year phase-in period and after considering the effects of inflation, the City would be required to increase its annual capital funding by $6.2 million per year in each of the next ten years to achieve this level of capital reinvestment.
- From an operating perspective, attaining the recommended standard of summer roads maintenance would require an additional investment of $4 million in the City's roads budget.
- The City intends to pursue funding from senior levels of government to finance the cost of its roads infrastructure requirement. In the absence of other sources of funding, the City would be required to increase the municipal levy by 3.3% to 3.5% each year over the next 10 years to meet the financial requirements outlined in the financial plan. The range of levy increases reflects different assumptions concerning the City's investment in growth infrastructure.

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CITY OF GREATER SUDBURY

Appendix A
Financial Plan Schedules
Scenario 1

CITY OF GREATER SUDBURY **Schedule 1**

Statement of Projected Roads Financial Requirement
For the Years Ending December 31
(in thousands)

	Reference	Budgeted 2012	2013	2014	Projected 2015	2016	2017	2018	2019	2020	2021	2022
(A) Operating expenditures												
Road maintenance and operating costs	*Schedule 3*	37,458	39,383	41,388	43,480	45,661	47,933	49,370	50,851	52,377	53,949	55,566
		37,458	39,383	41,388	43,480	45,661	47,933	49,370	50,851	52,377	53,949	55,566
(B) Capital expenditures and allocations												
Existing infrastructure	*Schedule 3*	34,949	37,598	42,914	48,448	54,415	60,578	67,103	74,005	81,300	89,005	96,877
Maley Drive expansion	*(note 1)*	2,585	2,585	2,585	2,585	2,585	2,585	2,585	2,585	2,585	2,585	2,585
Other growth projects	*(note 2)*	-	-	-	-	-	-	-	-	-	-	-
		37,534	40,183	45,499	51,033	57,000	63,163	69,688	76,590	83,885	91,590	99,462
(C) TOTAL EXPENDITURES (A) + (B)		**74,992**	**79,566**	**86,887**	**94,513**	**102,661**	**111,096**	**119,058**	**127,441**	**136,262**	**145,539**	**155,028**
(D) Non-taxation operating revenue												
Grant revenue		(40)	(40)	(40)	(40)	(40)	(40)	(40)	(40)	(40)	(40)	(40)
User fees and other charges		(751)	(751)	(751)	(751)	(751)	(751)	(751)	(751)	(751)	(751)	(751)
Contributions from reserves and reserve funds		(60)	(60)	(60)	(60)	(60)	(60)	(60)	(60)	(60)	(60)	(60)
		(851)	(851)	(851)	(851)	(851)	(851)	(851)	(851)	(851)	(851)	(851)
(E) Capital grant revenue												
Existing infrastructure		(7,959)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)
Maley Drive expansion	*(note 3)*	-	-	-	-	-	-	-	-	-	-	-
Other growth projects	*(note 3)*	-	-	-	-	-	-	-	-	-	-	-
		(7,959)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)
(F) Other capital revenues												
Future year financing		(700)	350	200	150	-	-	-	-	-	-	-
Contribution from reserves		(3,800)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)
		(4,500)	(1,650)	(1,800)	(1,850)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)
(G) TOTAL NON-TAXATION REVENUE (D) + (E) + (F)		(13,310)	(10,386)	(10,536)	(10,586)	(10,736)	(10,736)	(10,736)	(10,736)	(10,736)	(10,736)	(10,736)
ROADS FUNDING FROM MUNICIPAL LEVY (C) - (G)		61,682	69,180	76,351	83,927	91,925	100,360	108,322	116,705	125,526	134,803	144,292
Total increase in roads funding from municipal levy												
- Operating			1,925	2,005	2,092	2,181	2,272	1,437	1,481	1,526	1,572	1,617
- Capital			5,573	5,166	5,484	5,817	6,163	6,525	6,902	7,295	7,705	7,872
			7,498	7,171	7,576	7,998	8,435	7,962	8,383	8,821	9,277	9,489
Percentage increase in roads funding from municipal levy:												
- Operating			3.1%	2.9%	2.7%	2.6%	2.5%	1.4%	1.4%	1.3%	1.3%	1.2%
- Capital			9.0%	7.5%	7.2%	6.9%	6.7%	6.5%	6.4%	6.3%	6.1%	5.8%
			12.2%	10.4%	9.9%	9.5%	9.2%	7.9%	7.7%	7.6%	7.4%	7.0%
Percentage increase in municipal levy:												
- Operating			0.9%	0.9%	0.9%	0.9%	0.9%	0.6%	0.6%	0.6%	0.6%	0.6%
- Capital			2.6%	2.3%	2.4%	2.5%	2.5%	2.6%	2.6%	2.7%	2.8%	2.7%
			3.5%	3.2%	3.3%	3.4%	3.5%	3.2%	3.2%	3.3%	3.3%	3.3%

Average annual tax increase **3.3%**

Notes:

(1) Represents contributions to capital for Maley Drive project costs and debt servicing costs.
(2) Under this scenario, no growth projects other than Maley Drive have been considered.
(3) Maley Drive and other growth projects are reflected on a net basis, with the cost of the projects netted against grant revenues and debt proceeds. Accordingly, the financial model reflects the debt servicing cost associated with growth-related borrowings.

CITY OF GREATER SUDBURY **Schedule 2**

Statement of Projected Roads Operating Costs
For the Years Ending December 31
(in thousands)

	Reference	Budget	Projected									
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Administration	*(note 1)*	$ 462	476	490	505	520	536	552	569	586	604	622
Summer maintenance	*(note 1)*	13,926	14,344	14,774	15,217	15,674	16,144	16,628	17,127	17,641	18,170	18,715
Winter maintenance	*(note 1)*	15,283	15,741	16,213	16,699	17,200	17,716	18,247	18,794	19,358	19,939	20,537
Streetlighting	*(note 1)*	2,363	2,434	2,507	2,582	2,659	2,739	2,821	2,906	2,993	3,083	3,175
Engineering	*(note 1)*	4,966	5,115	5,268	5,426	5,589	5,757	5,930	6,108	6,291	6,480	6,674
Other	*(note 1)*	458	472	486	501	516	531	547	563	580	597	615
Operating costs before undernoted items		37,458	38,582	39,738	40,930	42,158	43,423	44,725	46,067	47,449	48,873	50,338
Service level increases for summer roads maintenance *(note 2)* :												
Cumulative annual increase, beginning of year		-	-	801	1,650	2,550	3,503	4,510	4,645	4,784	4,928	5,076
Inflationary increase on prior year's cumulative increase		-	-	24	50	77	105	135	139	144	148	152
Current year's increase		-	801	825	850	876	902	-	-	-	-	-
Cumulative annual increase, end of year		-	801	1,650	2,550	3,503	4,510	4,645	4,784	4,928	5,076	5,228
Total projected roads operating costs		$ 37,458	39,383	41,388	43,480	45,661	47,933	49,370	50,851	52,377	53,949	55,566

Notes:

(1) Based on the approved 2012 budget levels, adjusted for inflation at a rate of 3% per year. Amounts included all operating costs except for transfer to capital fund.
(2) Represents the incremental summer maintenance costs required as per the City's zero-based budget analysis. For the purpose of our analysis, we have assumed a five-year phase-in period.

CITY OF GREATER SUDBURY **Schedule 3**

Statement of Projected Roads Capital Financing Requirement
For the Years Ending December 31
(in thousands)

	References		Budget 2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
						Projected							
Sustainable capital investment requirement, beginning of year	*(note 1)*	$	69,986	72,086	74,249	76,476	78,770	81,133	83,567	86,074	88,656	91,316	94,055
Inflationary adjustment	*(note 2)*		2,100	2,163	2,227	2,294	2,363	2,434	2,507	2,582	2,660	2,739	2,822
Sustainable capital investment requirement, end of year			72,086	74,249	76,476	78,770	81,133	83,567	86,074	88,656	91,316	94,055	96,877
Less:													
Provision for Federal and Provincial gas tax grants	*Schedule 1*		(7,959)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)
Contributions from reserves and other non-taxation capital revenue	*Schedule 1*		(3,800)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)
Net local requirement for roads capital before phase-in provisions			60,327	64,364	66,591	68,885	71,248	73,682	76,189	78,771	81,431	84,170	86,992
Phase-in percentage	*(note 3)*		37.3%	43.6%	49.9%	56.2%	62.5%	68.8%	75.1%	81.4%	87.7%	94.0%	100.0%
Net roads capital spending before debt			22,490	28,063	33,229	38,713	44,530	50,693	57,218	64,120	71,415	79,120	86,992
Less: Debt financing	*(note 4)*		-	-	-	-	-	-	-	-	-	-	-
Contribution to capital fund		$	22,490	28,063	33,229	38,713	44,530	50,693	57,218	64,120	71,415	79,120	86,992
Estimated replacement value of roads infrastructure, prior year:													
Land	*(note 5)*	$	11,411	11,753	12,106	12,469	12,843	13,228	13,625	14,034	14,455	14,889	15,336
Drains	*(note 5)*		22,658	23,338	24,038	24,759	25,502	26,267	27,055	27,867	28,703	29,564	30,451
Streetlighting	*(note 5)*		17,613	18,141	18,685	19,246	19,823	20,418	21,031	21,662	22,312	22,981	23,670
Bridges and culverts	*(note 5)*		252,909	260,496	268,311	276,360	284,651	293,191	301,987	311,047	320,378	329,989	339,889
Gravel roads	*(note 5)*		163,601	168,509	173,564	178,771	184,134	189,658	195,348	201,208	207,244	213,461	219,865
Aterial roads (urban and rural)	*(note 5)*		623,652	642,362	661,633	681,482	701,926	722,984	744,674	767,014	790,024	813,725	838,137
Collector roads (urban and rural)	*(note 5)*		563,335	580,235	597,642	615,571	634,038	653,059	672,651	692,831	713,616	735,024	757,075
Local roads (urban and rural)	*(note 5)*		1,176,728	1,212,030	1,248,391	1,285,843	1,324,418	1,364,151	1,405,076	1,447,228	1,490,645	1,535,364	1,581,425
Traffic signals and signs	*(note 5)*		22,866	23,552	24,258	24,986	25,737	26,508	27,301	28,119	28,963	29,833	30,727
			2,854,773	2,940,416	3,028,628	3,119,487	3,213,072	3,309,464	3,408,748	3,511,010	3,616,340	3,724,830	3,836,575
Inflationary increase			85,643	88,212	90,859	93,585	96,392	99,284	102,262	105,330	108,490	111,745	115,097
Estimated replacement value of roads infrastructure, current year			2,940,416	3,028,628	3,119,487	3,213,072	3,309,464	3,408,748	3,511,010	3,616,340	3,724,830	3,836,575	3,951,672
Contribution to capital fund	*Schedule 1*		22,490	28,063	33,229	38,713	44,530	50,693	57,218	64,120	71,415	79,120	86,992
Future year financing	*Schedule 1*		700	(350)	(200)	(150)	-	-	-	-	-	-	-
Contributions from reserves and other non-taxation capital revenue	*Schedule 1*		3,800	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Federal and Provincial gas tax grants	*Schedule 1*		7,959	7,885	7,885	7,885	7,885	7,885	7,885	7,885	7,885	7,885	7,885
Total capital financing		$	34,949	37,598	42,914	48,448	54,415	60,578	67,103	74,005	81,300	89,005	96,877
Capital financing as a percentage of replacement valu			1.2%	1.2%	1.4%	1.5%	1.6%	1.8%	1.9%	2.0%	2.2%	2.3%	2.5%
Projected replacement cycle (in years			84	81	73	66	61	56	52	49	46	43	41

Notes:

(1) KPMG calculation based on estimated replacement value and useful lives of municipal road infratrstructure.
(2) Assumed to be 3% per year.
(3) Assumes a 10-year capital phase-in period.
(4) For the purposes of our analysis, no debt financing has been considered for capital expenditures relating to existing infrastructure.
(5) Based on tangible capital asset information provided by the City.

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CITY OF GREATER SUDBURY

Appendix B
Financial Plan Schedules
Scenario 2

CITY OF GREATER SUDBURY **Schedule 1**

Statement of Projected Roads Financial Requirement
For the Years Ending December 31
(in thousands)

	Reference	Budgeted 2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
					Projected							
(A) Operating expenditures												
Road maintenance and operating costs	*Schedule 3*	37,458	39,383	41,388	43,480	45,661	47,933	49,370	50,851	52,377	53,949	55,566
		37,458	39,383	41,388	43,480	45,661	47,933	49,370	50,851	52,377	53,949	55,566
(B) Capital expenditures and allocations												
Existing infrastructure	*Schedule 3*	34,949	37,598	42,914	48,448	54,415	60,578	67,103	74,005	81,300	89,005	96,877
Maley Drive expansion	*(note 1)*	2,585	2,585	2,585	2,585	2,585	2,585	2,585	2,585	2,585	2,585	2,585
Other growth projects	*(note 2)*	-	524	1,048	1,572	2,096	2,620	3,144	3,668	4,192	4,716	5,242
		37,534	40,707	46,547	52,605	59,096	65,783	72,832	80,258	88,077	96,306	104,704
(C) TOTAL EXPENDITURES (A) + (B)		**74,992**	**80,090**	**87,935**	**96,085**	**104,757**	**113,716**	**122,202**	**131,109**	**140,454**	**150,255**	**160,270**
(D) Non-taxation operating revenue												
Grant revenue		(40)	(40)	(40)	(40)	(40)	(40)	(40)	(40)	(40)	(40)	(40)
User fees and other charges		(751)	(751)	(751)	(751)	(751)	(751)	(751)	(751)	(751)	(751)	(751)
Contributions from reserves and reserve funds		(60)	(60)	(60)	(60)	(60)	(60)	(60)	(60)	(60)	(60)	(60)
		(851)	(851)	(851)	(851)	(851)	(851)	(851)	(851)	(851)	(851)	(851)
(E) Capital grant revenue												
Existing infrastructure		(7,959)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)
Maley Drive expansion	*(note 3)*	-	-	-	-	-	-	-	-	-	-	-
Other growth projects	*(note 3)*	-	-	-	-	-	-	-	-	-	-	-
		(7,959)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)
(F) Other capital revenues												
Future year financing		(700)	350	200	150	-	-	-	-	-	-	-
Contribution from reserves		(3,800)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)
		(4,500)	(1,650)	(1,800)	(1,850)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)
(G) TOTAL NON-TAXATION REVENUE (D) + (E) + (F)		(13,310)	(10,386)	(10,536)	(10,586)	(10,736)	(10,736)	(10,736)	(10,736)	(10,736)	(10,736)	(10,736)
ROADS FUNDING FROM MUNICIPAL LEVY (C) - (G)		61,682	69,704	77,399	85,499	94,021	102,980	111,466	120,373	129,718	139,519	149,534
Total increase in roads funding from municipal levy												
- Operating			1,925	2,005	2,092	2,181	2,272	1,437	1,481	1,526	1,572	1,617
- Capital			6,097	5,690	6,008	6,341	6,687	7,049	7,426	7,819	8,229	8,398
			8,022	7,695	8,100	8,522	8,959	8,486	8,907	9,345	9,801	10,015
Percentage increase in roads funding from municipal levy:												
- Operating			3.1%	2.9%	2.7%	2.6%	2.4%	1.4%	1.3%	1.3%	1.2%	1.2%
- Capital			9.9%	8.2%	7.8%	7.4%	7.1%	6.8%	6.7%	6.5%	6.3%	6.0%
			13.0%	11.0%	10.5%	10.0%	9.5%	8.2%	8.0%	7.8%	7.6%	7.2%
Percentage increase in municipal levy:												
- Operating			0.9%	0.9%	0.9%	0.9%	0.9%	0.6%	0.6%	0.6%	0.6%	0.6%
- Capital			2.9%	2.6%	2.6%	2.7%	2.7%	2.8%	2.8%	2.9%	2.9%	2.9%
			3.8%	3.5%	3.5%	3.6%	3.6%	3.3%	3.4%	3.4%	3.5%	3.4%

Average annual tax increase **3.5%**

Notes:

(1) Represents contributions to capital for Maley Drive project costs and debt servicing costs.
(2) Under this scenario, growth projects totalling $247 million are anticipated to be undertaken during the financial planning period.
(3) Maley Drive and other growth projects are reflected on a net basis, with the cost of the projects netted against grant revenues and debt proceeds. Accordingly, the financial model reflects the debt servicing cost associated with growth-related borrowings.

CITY OF GREATER SUDBURY **Schedule 2**

Statement of Projected Roads Operating Costs
For the Years Ending December 31
(in thousands)

	Reference	Budget	Projected									
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Administration	*(note 1)*	$ 462	476	490	505	520	536	552	569	586	604	622
Summer maintenance	*(note 1)*	13,926	14,344	14,774	15,217	15,674	16,144	16,628	17,127	17,641	18,170	18,715
Winter maintenance	*(note 1)*	15,283	15,741	16,213	16,699	17,200	17,716	18,247	18,794	19,358	19,939	20,537
Streetlighting	*(note 1)*	2,363	2,434	2,507	2,582	2,659	2,739	2,821	2,906	2,993	3,083	3,175
Engineering	*(note 1)*	4,966	5,115	5,268	5,426	5,589	5,757	5,930	6,108	6,291	6,480	6,674
Other	*(note 1)*	458	472	486	501	516	531	547	563	580	597	615
Operating costs before undernoted items		37,458	38,582	39,738	40,930	42,158	43,423	44,725	46,067	47,449	48,873	50,338
Service level increases for summer roads maintenance *(note 2)* :												
Cumulative annual increase, beginning of year		-	-	801	1,650	2,550	3,503	4,510	4,645	4,784	4,928	5,076
Inflationary increase on prior year's cumulative increase		-	-	24	50	77	105	135	139	144	148	152
Current year's increase		-	801	825	850	876	902	-	-	-	-	-
Cumulative annual increase, end of year		-	801	1,650	2,550	3,503	4,510	4,645	4,784	4,928	5,076	5,228
Total projected roads operating costs		$ 37,458	39,383	41,388	43,480	45,661	47,933	49,370	50,851	52,377	53,949	55,566

Notes:

(1) Based on the approved 2012 budget levels, adjusted for inflation at a rate of 3% per year. Amounts included all operating costs except for transfer to capital fund.
(2) Represents the incremental summer maintenance costs required as per the City's zero-based budget analysis. For the purpose of our analysis, we have assumed a five-year phase-in period.

CITY OF GREATER SUDBURY **Schedule 3**

Statement of Projected Roads Capital Financing Requirement
For the Years Ending December 31
(in thousands)

	References		Budget 2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
						Projected							
Sustainable capital investment requirement, beginning of year	*(note 1)*	$	69,986	72,086	74,249	76,476	78,770	81,133	83,567	86,074	88,656	91,316	94,055
Inflationary adjustment	*(note 2)*		2,100	2,163	2,227	2,294	2,363	2,434	2,507	2,582	2,660	2,739	2,822
Sustainable capital investment requirement, end of year			72,086	74,249	76,476	78,770	81,133	83,567	86,074	88,656	91,316	94,055	96,877
Less:													
Provision for Federal and Provincial gas tax grants	*Schedule 1*		(7,959)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)	(7,885)
Contributions from reserves and other non-taxation capital revenue	*Schedule 1*		(3,800)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)
Net local requirement for roads capital before phase-in provisions			60,327	64,364	66,591	68,885	71,248	73,682	76,189	78,771	81,431	84,170	86,992
Phase-in percentage	*(note 3)*		37.3%	43.6%	49.9%	56.2%	62.5%	68.8%	75.1%	81.4%	87.7%	94.0%	100.0%
Net roads capital spending before debt			22,490	28,063	33,229	38,713	44,530	50,693	57,218	64,120	71,415	79,120	86,992
Less: Debt financing	*(note 4)*		-	-	-	-	-	-	-	-	-	-	-
Contribution to capital fund		$	22,490	28,063	33,229	38,713	44,530	50,693	57,218	64,120	71,415	79,120	86,992
Estimated replacement value of roads infrastructure, prior year:													
Land	*(note 5)*	$	11,411	11,753	12,106	12,469	12,843	13,228	13,625	14,034	14,455	14,889	15,336
Drains	*(note 5)*		22,658	23,338	24,038	24,759	25,502	26,267	27,055	27,867	28,703	29,564	30,451
Streetlighting	*(note 5)*		17,613	18,141	18,685	19,246	19,823	20,418	21,031	21,662	22,312	22,981	23,670
Bridges and culverts	*(note 5)*		252,909	260,496	268,311	276,360	284,651	293,191	301,987	311,047	320,378	329,989	339,889
Gravel roads	*(note 5)*		163,601	168,509	173,564	178,771	184,134	189,658	195,348	201,208	207,244	213,461	219,865
Aterial roads (urban and rural)	*(note 5)*		623,652	642,362	661,633	681,482	701,926	722,984	744,674	767,014	790,024	813,725	838,137
Collector roads (urban and rural)	*(note 5)*		563,335	580,235	597,642	615,571	634,038	653,059	672,651	692,831	713,616	735,024	757,075
Local roads (urban and rural)	*(note 5)*		1,176,728	1,212,030	1,248,391	1,285,843	1,324,418	1,364,151	1,405,076	1,447,228	1,490,645	1,535,364	1,581,425
Traffic signals and signs	*(note 5)*		22,866	23,552	24,258	24,986	25,737	26,508	27,301	28,119	28,963	29,833	30,727
			2,854,773	2,940,416	3,028,628	3,119,487	3,213,072	3,309,464	3,408,748	3,511,010	3,616,340	3,724,830	3,836,575
Inflationary increase			85,643	88,212	90,859	93,585	96,392	99,284	102,262	105,330	108,490	111,745	115,097
Estimated replacement value of roads infrastructure, current year			2,940,416	3,028,628	3,119,487	3,213,072	3,309,464	3,408,748	3,511,010	3,616,340	3,724,830	3,836,575	3,951,672
Contribution to capital fund	*Schedule 1*		22,490	28,063	33,229	38,713	44,530	50,693	57,218	64,120	71,415	79,120	86,992
Future year financing	*Schedule 1*		700	(350)	(200)	(150)	-	-	-	-	-	-	-
Contributions from reserves and other non-taxation capital revenue	*Schedule 1*		3,800	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Federal and Provincial gas tax grants	*Schedule 1*		7,959	7,885	7,885	7,885	7,885	7,885	7,885	7,885	7,885	7,885	7,885
Total capital financing		$	34,949	37,598	42,914	48,448	54,415	60,578	67,103	74,005	81,300	89,005	96,877
Capital financing as a percentage of replacement valu			1.2%	1.2%	1.4%	1.5%	1.6%	1.8%	1.9%	2.0%	2.2%	2.3%	2.5%
Projected replacement cycle (in years			84	81	73	66	61	56	52	49	46	43	41

Notes:

(1) KPMG calculation based on estimated replacement value and useful lives of municipal road infratrstructure.
(2) Assumed to be 3% per year.
(3) Assumes a 10-year capital phase-in period.
(4) For the purposes of our analysis, no debt financing has been considered for capital expenditures relating to existing infrastructure.
(5) Based on tangible capital asset information provided by the City.

Financial Planning for Roads
Restrictions

The financial plan outlined in this report represents a forecast of the financial performance of the City's roads services under a series of assumptions that are documented within the plan. The financial plan does not represent a formal, multi-year budget for roads. The approval of operating and capital budgets for roads is undertaken as part of the City's overall annual budgeting process. Accordingly, the financial performance outlined in this document is subject to change based on future decisions of Council with respect to operating and capital costs, tax increases and unforeseen revenues and expenses. It is the intention of the City to adjust the financial plan on an annual basis to reflect the most recent budgetary decisions made by Council.

The information contained in this report has been compiled from information provided by the City. We have not audited, reviewed or otherwise attempted to verify the accuracy or completeness of such information. Readers are cautioned that this information may not be appropriate for their purposes. We reserve the right (but will be under no obligation) to amend this report and advise accordingly in the event that, in our opinion, new material information comes to our attention that may be contrary to or different from that which is set out in this document. Comments in this report should not be interpreted to be legal advice or opinion.

The contents of this report reflect our understanding of the facts derived from the examination of documents provided to us. This report includes or makes reference to future oriented financial information. We have not audited or otherwise reviewed the financial information or supporting assumptions and as such, express no opinion as to the reasonableness of the information provided.

The individuals that prepared this report did so to the best of their knowledge, acting independently and objectively. KPMG LLP's compensation is not contingent on any action or event resulting from the use of this report.

This report, including any attached appendices, must be considered in its entirety by the reader.

Appendix "C" - Priority Projects

Description	Project Type	Road Class	Cost
Lorne Street from Martindale Road to Logan Avenue	Resurfacing	Arterial -Collector	$ 5,500,000
Skead Road (MR 86) from MR 89 to Old Skead Road North	Resurfacing	Arterial -Collector	$ 3,900,000
Large Asphalt Patches (Various Locations)	Resurfacing	Arterial -Collector	$ 2,000,000
Long Lake Road from Hwy 17 to 0.8km South	Resurfacing	Arterial -Collector	$ 1,500,000
MR 84 from Capreol Lake Road to Suez Drive	Resurfacing	Arterial -Collector	$ 2,275,000
MR 15 from Belisle Drive to 2.2km West	Resurfacing	Arterial -Collector	$ 1,750,000
Old Hwy 17 (MR 55) from McCharles Lake Road to 1.75km West	Resurfacing	Arterial -Collector	$ 1,390,000
Beatty Street from Frood Road to Elm Street	Resurfacing	Arterial -Collector	$ 1,170,000
Walford Road from Regent Street to Paris Street	Resurfacing	Arterial -Collector	$ 1,090,000
Elm Street from Ethelbert Street to Big Nickel Mine Road	Resurfacing	Arterial -Collector	$ 900,000
Auger Avenue from Hawthorne Drive to Falconbridge Highway	Resurfacing	Arterial -Collector	$ 860,000
Power Street from MR 55 to Collins Drive	Resurfacing	Arterial -Collector	$ 525,000
Brady Street from Minto Street to Shaugnessy Street	Resurfacing	Arterial -Collector	$ 500,000
Marier Street from MR 35 to Notre Dame Street	Resurfacing	Arterial -Collector	$ 360,000
Elm Street from Frood Road to Elgin Street	Resurfacing	Arterial -Collector	$ 275,000
Kelly Lake Road from Copper Street to Sudbury Wastewater Treatment Plant	Resurfacing	Arterial -Collector	$ 275,000
Kingsway from Barry Downe Road to Falconbridge Highway	Resurfacing	Arterial -Collector	$ 1,950,000
Dominion Drive from Elmview Drive to MR 80	Resurfacing	Arterial -Collector	$ 1,470,000
Bancroft Drive from Bellevue Avenue to First Avenue	Resurfacing	Arterial -Collector	$ 1,240,000
Hill Street from Hwy 17 to 0.9 km South	Resurfacing	Arterial -Collector	$ 1,135,000
Attlee Avenue from Gemmell Street to LaSalle Boulevard	Resurfacing	Arterial -Collector	$ 1,100,000
Notre Dame Avenue from Wilma Avenue to 0.6 km North of Cambrian Heights Drive	Resurfacing	Arterial -Collector	$ 930,000
York Street from Regent Street to Paris Street	Resurfacing	Arterial -Collector	$ 830,000
Main Street East from MR 15 to Railway Tracks	Resurfacing	Arterial -Collector	$ 650,000
Brookside Road from Errington Avenue to St. Onge Street	Resurfacing	Arterial -Collector	$ 455,000
Dell Street from Morin Avenue to Snowden Avenue	Resurfacing	Arterial -Collector	$ 410,000
Melvin Avenue from Kathleen Street to Mabel Street	Resurfacing	Arterial -Collector	$ 380,000
MR15 from 4.6km west of Martin Road to 7.6km west of Martin Road	Resurfacing	Arterial -Collector	$ 3,100,000
Ramps from Big Nickel Road to Lorne Street	Resurfacing	Arterial -Collector	$ 2,500,000
MR55 from MR24 to Eve Street	Resurfacing	Arterial -Collector	$ 1,970,000
Valleyview Road from Martin Road to Evans Road	Resurfacing	Arterial -Collector	$ 1,430,000
MR84 from Cote Blvd to Linden Drive	Resurfacing	Arterial -Collector	$ 1,200,000
MR24 from Caverzan Drive to CPR Tracks	Resurfacing	Arterial -Collector	$ 200,000
Gutcher Avenue from Mary Street to Lorne Street	Resurfacing	Local Roads	$ 480,000
Paul Street from Graham Road to Caroline Street	Resurfacing	Local Roads	$ 480,000
Arvo Street from Sparks Street to 0.4 km North	Resurfacing	Local Roads	$ 460,000
St. Nicholas Street from Edinburgh Street to Wembley Drive	Resurfacing	Local Roads	$ 410,000
Clifford Crescent from Percy Avenue to Flake Street	Resurfacing	Local Roads	$ 230,000
Carol Street from MR 80 to Suzanne Street	Resurfacing	Local Roads	$ 220,000
Nicole Street from Arlington Drive to Riverside Drive	Resurfacing	Local Roads	$ 220,000
Second Avenue from Torbay Road to Bayside Crescent	Resurfacing	Local Roads	$ 200,000
Mary Court from Orell Street to Orell Street	Resurfacing	Local Roads	$ 190,000
Normand Avenue from Leonard Avenue North to Arlington Drive	Resurfacing	Local Roads	$ 180,000
Chenier Street from Oscar Street to MR 80	Resurfacing	Local Roads	$ 180,000
Traffic Calming	Resurfacing	Local Roads	$ 165,000
Barrington Street from Falconbridge Highway to End	Resurfacing	Local Roads	$ 150,000
Rene Street from Addy Crescent to Mederic Street	Resurfacing	Local Roads	$ 110,000

Lamothe Street from Barry Downe Road to Leon Avenue	Resurfacing	Local Roads	$ 125,000
Noble Street from Granite Street to Huron Street	Resurfacing	Local Roads	$ 90,000
Hope Street from Huron Street to Granite Street	Resurfacing	Local Roads	$ 90,000
Aurore Street from Monique Street to 0.1 km East	Resurfacing	Local Roads	$ 80,000
MacLachlan Street from Spruce Street to South End	Resurfacing	Local Roads	$ 80,000
Parkwood Street from Maple Street to North End	Resurfacing	Local Roads	$ 35,000
Minto Street from Larch Street to Elgin Street	Resurfacing	Local Roads	$ 640,000
Birch Street, Maple Street, Oak Street and Cedar Street	Resurfacing	Local Roads	$ 560,000
Crescent Avenue from Young Street to Dennie Street	Resurfacing	Local Roads	$ 450,000
First Avenue from Balsam Street to 0.5 km South	Resurfacing	Local Roads	$ 350,000
Hesta Street from Arlington Drive to Riverside Drive	Resurfacing	Local Roads	$ 330,000
Mary Street from Desmorest Street to Gutcher Avenue	Resurfacing	Local Roads	$ 300,000
Talon Street from Will Street to Josephine Street	Resurfacing	Local Roads	$ 230,000
Northway Avenue from LaSalle Boulevard to Palisade Place	Resurfacing	Local Roads	$ 220,000
Trembley Street from Laval Street to Talon Street	Resurfacing	Local Roads	$ 210,000
Coleen Avenue from Gravel Drive to Ivan Street	Resurfacing	Local Roads	$ 205,000
Glendale Court from Flake Street W to Flake Street East	Resurfacing	Local Roads	$ 190,000
Carmen Street from LaSalle Boulevard to 0.4 km South	Resurfacing	Local Roads	$ 180,000
Gregg Lane from Martindale Road to Gino Street	Resurfacing	Local Roads	$ 140,000
Mont Adam Street from Lloyd Street to Cochrane Street	Resurfacing	Local Roads	$ 120,000
Rita Street from Wilfred Street to 0.1 km East	Resurfacing	Local Roads	$ 80,000
Bethune Avenue from Randolph Street to Richard Street	Resurfacing	Local Roads	$ 80,000
Danforth Avenue from Fielding Street to Barrington Street	Resurfacing	Local Roads	$ 680,000
Creighton Road from School Street to Godfrey Drive	Resurfacing	Local Roads	$ 445,000
O'Neil Drive East from Penman Avenue to Margaret Street South	Resurfacing	Local Roads	$ 310,000
Strathmere Court from Robinson Drive E to Robinson Dr W	Resurfacing	Local Roads	$ 300,000
Leonard Street from Hwy 144 to North End	Resurfacing	Local Roads	$ 285,000
Field Street from Algonquin Road to Larchwood Drive	Resurfacing	Local Roads	$ 280,000
Bonin Street from Fire Route T to Montee Principal	Resurfacing	Local Roads	$ 240,000
Lillian Street from Dominion Drive to 0.5 km North	Resurfacing	Local Roads	$ 220,000
McAllister Avenue from Lasalle Blvd to South End	Resurfacing	Local Roads	$ 205,000
Loach's Road from Eden Point Drive to Cerelli Court	Resurfacing	Local Roads	$ 165,000
LED Streetlight Replacement	Streetlights	Streetlights	$ 6,500,000
MR35 Widening	Expansion	Arterial	$29,150,000
Kingsway Realignment	Expansion	Arterial	$24,600,000