

## SECTOR IN-DEPTH

11 MAY 2015

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## TABLE OF CONTENTS

Municipalities' capital needs are growing, particularly in Canada's large metropolitan areas	1
New debt issuance in 2015 and 2016 will be similar to 2014	3
High liquidity reserves and low debt burden expand capacity for capital spending	4
Reliance on mix of funding sources will limit increase in debt	5
Appendix 1	8
Appendix 2	9
Moody's Related Research	10

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Canadian Municipalities

# Infrastructure Needs Drive Higher Capital Spending in 2015 and 2016

The majority of large metropolitan municipalities in Canada will continue to increase their capital spending in 2015 and 2016 to fund necessary investments in roads, transit, and utilities & environmental services. While some local governments will add to their debt levels, the increases in their debt burden relative to operating revenue will be manageable for most. Debt issuance will also be limited by the availability of other funding sources, including reserves and federal or provincial grants. We expect the combined direct capital market debt issuance of rated Canadian municipalities to remain similar to 2014 in both 2015 and 2016.

- » **Municipalities' capital needs are growing, particularly in Canada's large metropolitan areas.** We expect capital spending in areas with strong population growth and increasing levels of urbanization to remain high. The majority of municipalities are focused on investing in growth and upgrades of transportation, utilities and environmental services.
- » **New debt issuance in 2015 and 2016 will be similar to 2014.** Despite an expected average increase in capital spending, we expect combined new direct debenture issuance from rated Canadian municipalities to remain approximately in line with historical issuance levels.
- » **High liquidity reserves and low debt expand capacity for capital spending.** While we expect many municipalities to increase their debt in the next two to three years, debt burdens are expected to remain affordable for most. A high level of liquidity resources can expand the capacity for municipalities to borrow, and increase the portion of cash-financed capital spending (pay-as-you-go financing), without weakening their credit profile.
- » **Reliance on a mix of funding sources will limit debt increases.** Canadian municipalities rely on a mix of funding sources for capital spending, given the high up front investment often required in infrastructure projects. Other funding sources, including reserves, pay-as-you-go financing, and provincial or federal grants will limit debt increases and support the expected continued rise in capital spending. Canadian municipalities are also exploring new funding sources. Development charges and dedicated infrastructure tax levies are an important funding tool beyond property tax revenue for a number of municipalities.

## Municipalities' capital needs are growing, particularly in Canada's large metropolitan areas

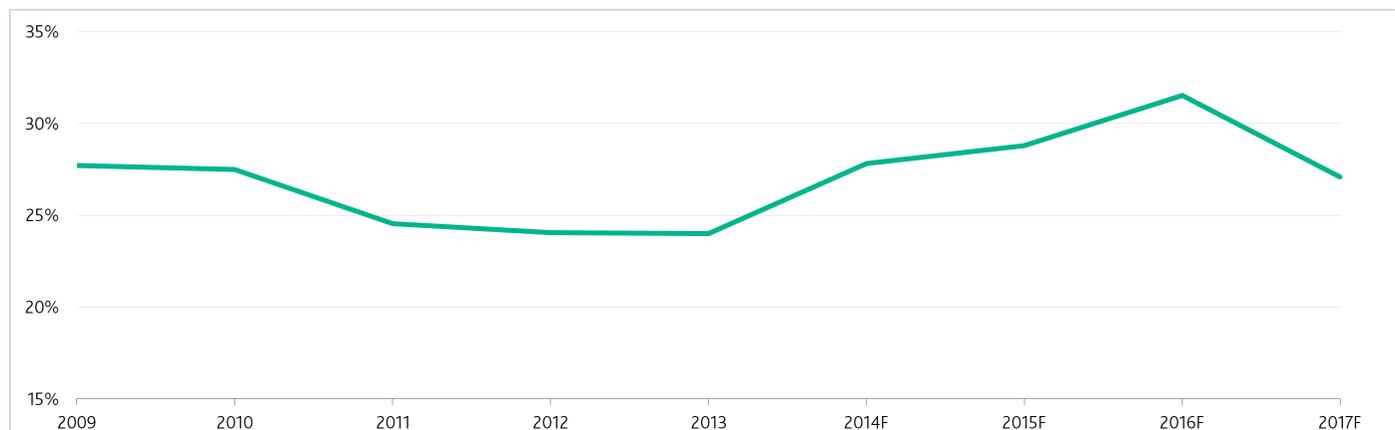
Multiple studies have identified a significant infrastructure deficit in Canada's municipal sector over recent years, a reflection of historical underinvestment and population growth. Canadian municipalities, in common with other local governments around the world, are responsible for a large range of capital assets including bridges, roads, transit systems, environmental services, police stations, public buildings and parks.

However, 2015 capital budgets of Canadian municipalities show that municipalities are focused on addressing any infrastructure deficit. Planned capital investments in roads, transit systems and environmental services are high.

Based on Canadian local governments' 2015 budgets, we expect their capital spending ratios to increase, approaching at least 30% of total revenue on average by 2016. Capital expenditure could level off in 2017, but should remain well above the levels achieved in 2011-2013 (see Exhibit 1). On average, the capital spending (cash flow basis) of Canadian municipalities amounted to around 26% of total revenue between 2009 and 2013. Higher capital spending in 2009 and 2010 reflected significant federal stimulus through the CAD33 billion Building Canada Fund that was announced in 2007.

Exhibit 1

### Capital spending could peak by 2016 Capital Expenditures/Total Revenues (%)



Please see appendix for a list of included issuers.

Source: Public Accounts and Capital Budgets of selected local governments, Moody's.

Higher expected capital spending needs over the next two years reflects an increased focus on investments in new infrastructure by Canadian municipalities.

Demand for new infrastructure follows a period of consistent population growth, particularly in the large urban centers of Alberta and Saskatchewan, as well as the Greater Toronto Area (GTA) and Vancouver (Aaa). Municipalities with high population growth such as Edmonton (not rated), Saskatoon (not rated), and York Region (Aaa) have invested close to 40% of their revenues in infrastructure between 2009 and 2013.

Toronto (Aa1) and Ottawa (Aaa) are among the few rated Canadian municipalities, dedicating the majority of capital spending in their long-term plans to state-of-good repair projects. While Toronto has not experienced the same population growth as some of its neighboring GTA municipalities, a significant proportion of the GTA population uses Toronto's infrastructure system on a daily basis.

Large-scale rapid transit projects in a number of cities will increase their near-term capital needs, but should reduce the stress on their current transit systems going forward. We expect capital spending in large metropolitan areas with strong population growth and increasing urbanization to remain high in the medium term.

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Although many Canadian municipalities are planning to boost their infrastructure investments over the next two years, budgeted capital expenditures in the long-term capital plans of Canadian municipalities often exceed actual capital expenditures at year-end. This is due to a number of reasons, including post-budget project prioritization, overestimated requests by city departments, project deferral, delays in execution, as well as projects coming in under budget.

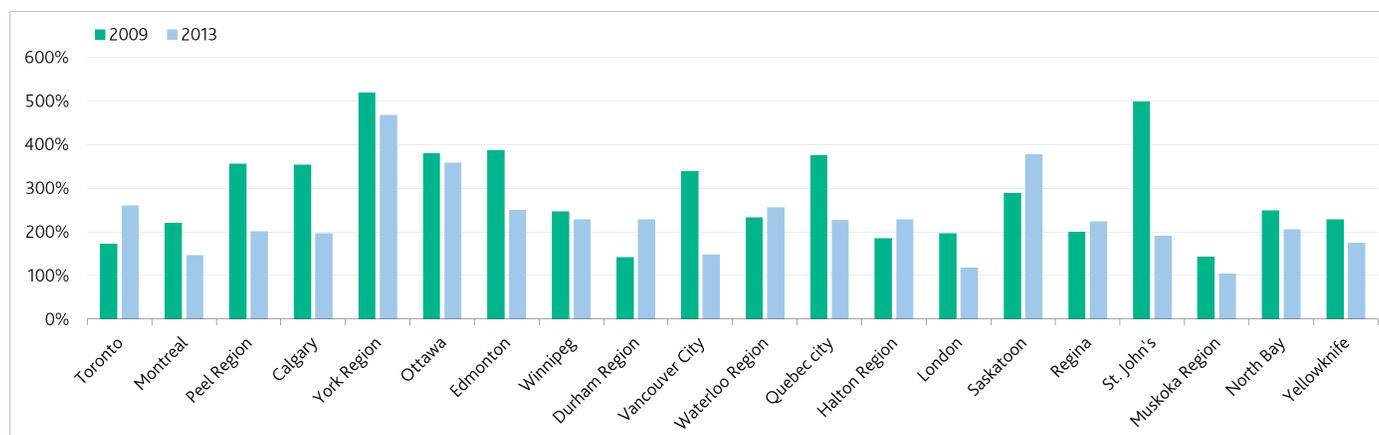
A municipality's management resources and project management experience also have a critical bearing on its ability to execute a large capital plan successfully. As the number, size and complexity of projects increases, more sophisticated project management is required.

Rigorous project management positively affects credit quality because it reflects sound governance practices, and can reduce exposure to unexpected project risks. Centralized and long-term planning is critical to guiding projects towards a successful conclusion, while minimizing cost overruns and project delays. This is particularly true of the municipalities that are currently or are planning on executing complex rapid transit projects: Toronto, York Region, Region of Waterloo (Aaa), Ottawa, London (Aaa), Edmonton.

The reinvestment ratios (capital expenditures/depreciation expense) of Canadian municipalities have remained healthy over recent years, despite a reduction from 2009 levels. This supports our view that Canadian municipalities have focused on maintaining capital assets in good repair and investing in growth, even if they have often under spent their budget. We have no evidence that Canadian municipalities have deferred their maintenance needs substantially since 2009. Capital expenditure on average continued to outpace depreciation by more than 200% in 2013 (see exhibit 2). Nevertheless, the median age of capital assets has remained largely unchanged since 2009, a sign that most Canadian municipalities are just keeping up with their investment needs. The City of Montreal (Aa2), for instance, estimated in its 2012 capital budget that annual spending of CAD2.1 billion would be required to address all of the city's needs, well above the CAD1.1 billion the city spent on average between 2009 and 2013.

Exhibit 2

**Canadian municipalities' reinvestment ratio (capital expenditures/depreciation expense) has declined since 2009, but remains solid**  
Annual Capital Expenditure/Depreciation (%)



Source: Local governments, Moody's.

### New debt issuance in 2015 and 2016 will be similar to 2014

Debt will remain a relevant source of financing capital expenditures. But other funding sources will limit the need for new debt issuances despite the expected increase in capital spending. We expect the total new direct debt issuance of rated Canadian municipalities to remain similar to 2014 in both 2015 and 2016 (see Exhibit 3).

The scale of direct capital market debenture issuance by local governments varies significantly, depending on the size of the city, and its total borrowing requirement. The largest direct debt issuers in the last few years have been Toronto, Montreal, the Region of Peel, the Region of York, Quebec City, Ottawa and Vancouver.

Municipalities in Canada have various options for issuing debt. They can borrow through their provincial governments (e.g. the Alberta Capital Financing Authority), or through pooled financing (Municipal Finance Authority of British Columbia), or directly from capital market investors through serial or bullet debentures.

Exhibit 3

### Direct debenture issuance of largest Canadian municipalities to remain stable in 2015 and 2016

Direct Debenture Issuance (CAD Millions)	2014	2015 expected	2016 expected
Toronto, City of	600	615	785
Montreal, City of	950	1000	1000
York Region	450	286	330
Peel, Region of	37	40	46
Quebec City	435	450	300
Ottawa, City of	0	138	175
Winnipeg, City of	173	75	100
Vancouver, City of	105	100	100

Source: Historical data: Moody's, Bloomberg. Historical date reflects actual issuance including refinancing needs. Forecasts are based on Moody's expectations and 2015 capital budgets.

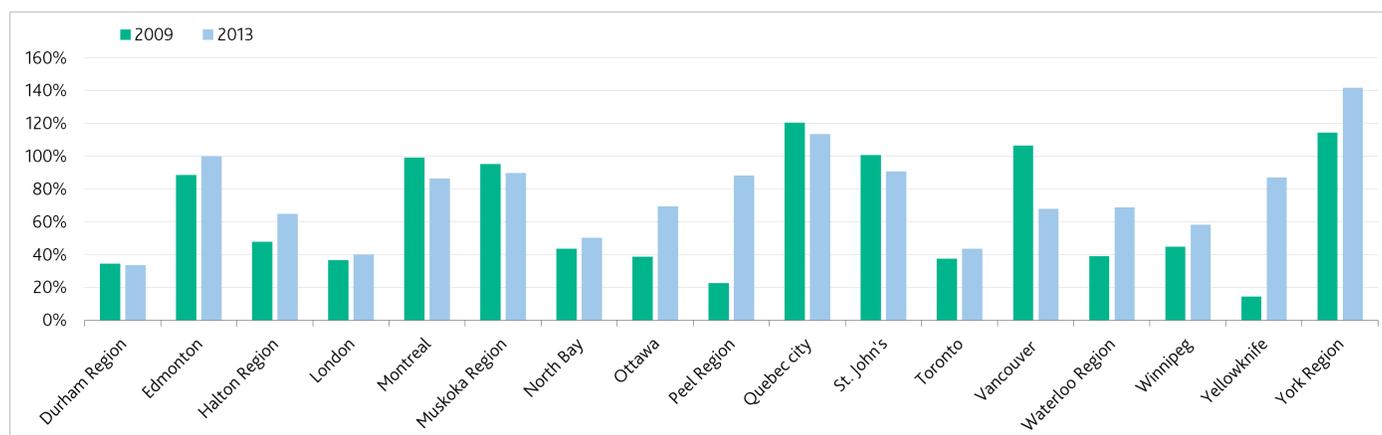
### High liquidity reserves and low debt burden expand capacity for capital spending

The majority of rated Canadian municipalities have healthy gross operating balances, an affordable debt burden, and liquidity reserves that often exceed their outstanding debt (see Exhibits 4 and 5). Excess liquidity provides protection for creditors, limits the need to borrow, and allows for modest increases in pay-as-you-go financing for capital projects, without risking deterioration of the municipality's credit profile.

Exhibit 4

### About 50% of municipalities have increased their debt relative to operating revenues to support capital spending

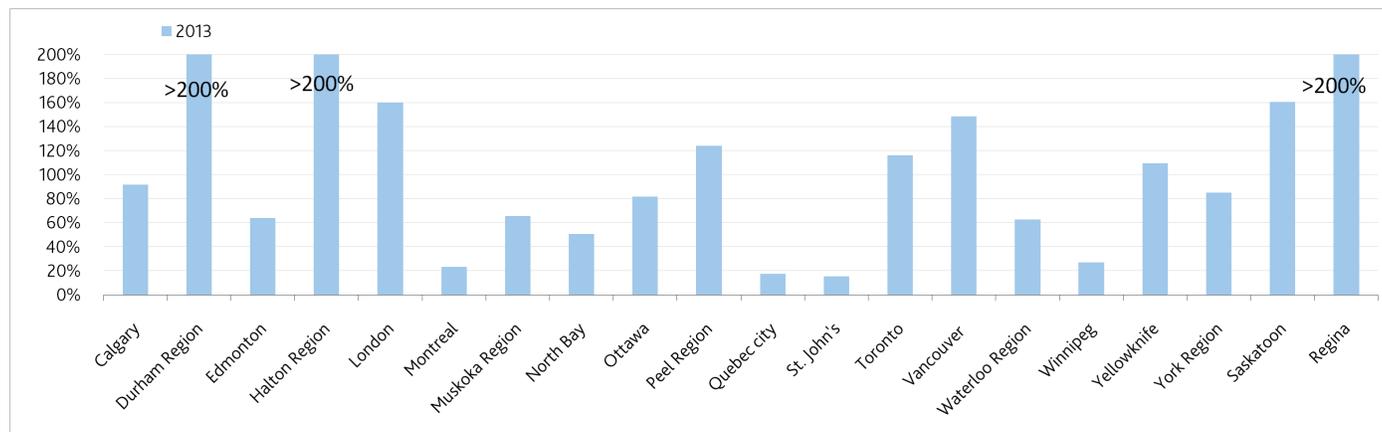
#### Net Direct and Indirect Debt as a % of operating revenue



Source: Local governments public accounts, Moody's.

Exhibit 5

High level of cash and investments expands capacity for pay-as-you-go financing Cash and investments (net of sinking funds)/Net Direct and Indirect Debt (%) (2013)



Source: Local governments public accounts, Moody's.

Based on municipalities' capital plans, we currently anticipate continued modest increases in debt to operating revenue over the next 2-3 years for the majority of rated local governments. There are a few exceptions, however; the debt burdens of London, Peel, Muskoka, North Bay, Quebec City, Yellowknife and Vancouver should remain broadly stable, or decrease slightly.

Approximately 50% of rated local governments have maintained fairly stable debt burdens as a proportion of operating revenue over the last five years. Of those that have added to their debt, York, Peel and Yellowknife have seen the steepest increases since 2009. This limits their headroom for further debt increases within their current rating category.

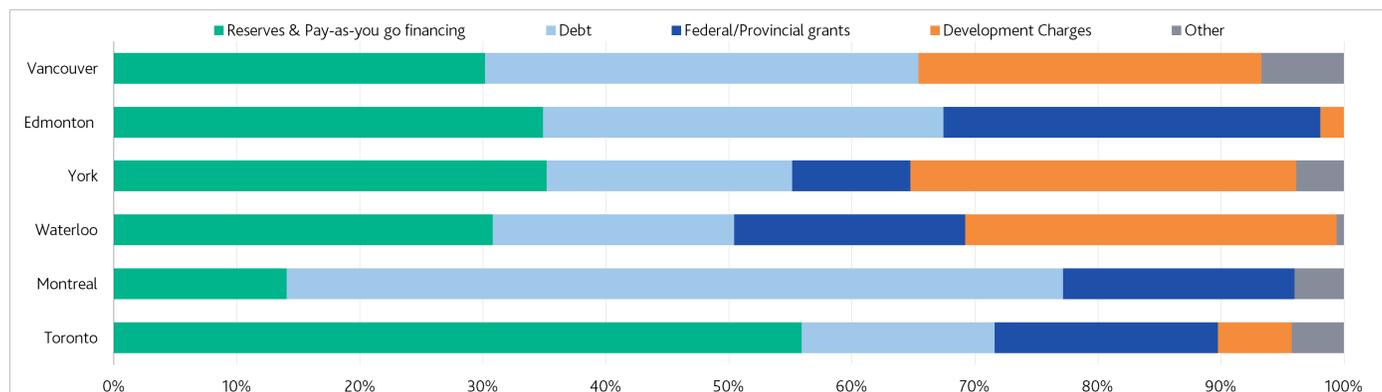
Borrowing restrictions imposed by provincial governments as part of their financial oversight of the municipalities also help ensure that municipalities maintain adequate long-term capacity for capital spending. Canadian municipalities can legally only issue debt for capital projects, and are barred from borrowing to finance operating expenditures. In addition, some municipalities, including Toronto, Winnipeg and Vancouver, are subject to limits on tax-supported debt service or have other borrowing limits.

We expect Toronto and Vancouver could come close to their tax-supported debt service limits if their capital plans are executed as planned, even though both cities have modest debts. While debt service limits might restrict short-term capacity to increase capital spending, in particular for projects with high initial cash outlays, in the long-term they support a healthy financial profile and ensure sustainable capital spending.

### Reliance on mix of funding sources will limit increase in debt

Canadian municipalities have access to a variety of funding sources, limiting their reliance on debt to achieve their capital plans. Funding sources other than debt usually include reserves, development charge revenues, pay-as-you-go financing, and provincial or federal grants. The exact funding mix can vary significantly from municipality to municipality, and will also depend on project type (see Exhibit 6). Large capital projects usually have to be financed from a variety of different sources to ensure adequate funding, and to limit the risk of funding withdrawal.

Exhibit 6  
**Mix of funding sources can vary**

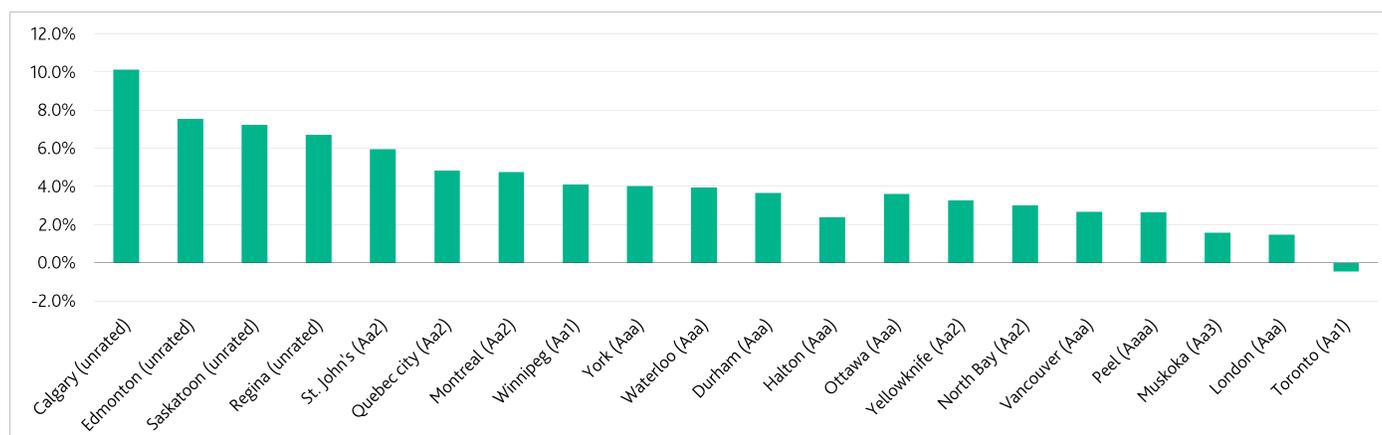


Source: Initially approved or draft 2015 long-term capital budgets (tax and rate supported) of local governments, Moody's. Please note that some of the indicated funding sources such as debt issuance might be reduced or supported by future government grants not yet recognized in capital budgets or other revenue sources.

The primary revenue source for Canadian municipalities are property tax revenues and user charges. Both tend to be stable and predictable, a key supportive factor for the municipalities' ratings. Growth in the tax base can increase property tax revenue growth, expanding municipalities' capacity for capital spending.

However, property tax revenue is usually insufficient to fund infrastructure projects with high initial cash outlays, as local governments often only raise property taxes in line with inflation (see Exhibit 7). In addition, local governments tend to rely on property tax revenues to cover other operating expenditures.

Exhibit 7  
**Property tax revenue growth can benefit from tax base growth, but will also depend on increases in the tax rate3-year (2010-2013) CAGR in property tax revenue growth**



Source: Local governments public accounts.

Local governments have shown willingness to increase user charges to cover utilities' operating expenses and replacement project costs, although again, the revenues raised are often outweighed by substantial initial cash outlays.

Development charges - fees levied on new developments or extensions to existing buildings - will continue to finance a substantial portion of capital spending for Ontario municipalities in the GTA and Vancouver, supporting 30-40% of their 10-year capital plans.

Many municipalities have also introduced dedicated tax levies to finance infrastructure in recent years, often as an add-on to property taxes. They provide a tool for municipalities to build up a dedicated reserve, while justifying property tax increases to taxpayers.

Relying too heavily on development charges is risky, however, as projects may incur costs before charge revenues are earned, while revenues also tend to fluctuate in line with construction activity. Canadian municipalities are therefore likely to explore ways of increasing land value capture beyond property taxes and development charges.

We expect Canadian municipalities will seek grants from provincial and federal governments under the new 10-year CAD53.0 billion New Building Canada Fund, especially for high profile transit projects. The fund, launched in 2014, includes the CAD14.0 billion New Building Canada Fund, the CAD32.2 billion Community Improvement Fund, a CAD6.6 billion fund carried forward from the 2007 Building Canada Fund, as well as a CAD1.25 billion P3 (Public-Private-Partnership) fund. The Community Improvement Fund includes a Federal Gas Tax Fund, which provides a permanent funding source for municipal infrastructure investments. Other funding support from provincial and federal infrastructure programs is usually granted on a project application basis.

Provincial and federal funding supports on average around 15-20% of Canadian municipalities' 2015 long-term tax and rate-supported capital budgets.

P3s, in which private investors finance all or part of a project in exchange for a return, are more prevalent at the provincial level, for instance for funding new provincial hospitals or transportation projects.

Municipalities such as the Region of Waterloo or the City of Ottawa are currently also using the P3 model to fund rapid transit projects. The P3 market in Canada is mature, and we do not expect a significant increase in P3 projects at the municipal level. However, more Canadian municipalities might in future consider P3 financing, particularly for large transportation projects, stadiums or new environmental facilities.

## Appendix 1

### Sample of selected Canadian municipalities

Municipality	Moody's Rating	Rating Outlook
Calgary, City of	not rated	
Edmonton, City of	not rated	
Regina, City of	not rated	
Saskatoon, City of	not rated	
York, Region of	Aaa	Stable
Peel, Region of	Aaa	Stable
Waterloo, Region of	Aaa	Stable
Halton, Region of	Aaa	Stable
Durham, Region of	Aaa	Stable
Ottawa, City of	Aaa	Stable
London, City of	Aaa	Stable
Vancouver, City of	Aaa	Stable
Toronto, City of	Aa1	Stable
Winnipeg, City of	Aa1	Negative
Muskoka, District Municipality of	Aa2	Negative
Montreal, City of	Aa2	Stable
Quebec City	Aa2	Stable
North Bay, City of	Aa2	Stable
St. John's, City of	Aa2	Stable
Yellowknife, City of	Aa2	Stable

Source: Moody's

## Appendix 2

### Municipal P3 projects across Canada currently being executed

Project	Project Category	Project Status	Municipality	Province
Edmonton Valley Line LRT Expansion	Transportation	Request for proposals	Edmonton	Alberta
Calgary Stoney CNG Transit Bus Garage	Transportation	Request for proposals	Calgary	Alberta
Winnipeg Southwest Rapid Transit Corridor Phase 2	Transportation	Request for proposals	Winnipeg	Manitoba
ION Stage 1 LRT Waterloo	Transportation	Under construction	Region of Waterloo	Ontario
Ottawa LRT	Transportation	Under construction	Ottawa	Ontario
Saskatoon Civi Operations Center Phase One	Transportation	Financial close	Saskatoon	Saskatchewan
Saskatoon Civi Operations Center Phase One	Transportation	Request for proposals	Saskatoon	Saskatchewan
Saskatoon Civi Operations Center Phase One	Transportation	Financial close	Saskatoon	Saskatchewan
Saskatoon North Commuter Parkway and Traffic Bridge Replacement	Transportation	Request for proposals	Saskatoon	Saskatchewan
Wood Buffalo Sports and Entertainment Centre	Recreational & Culture	Preferred proponent	Fort McMurray	Alberta
Moosaic Stadium	Recreational & Culture	Under construction	Regina	Saskatchewan
Lac La Biche Wastewater Treatment Facility	Environmental	Under construction	Lac La Biche	Alberta
Biosolids Energy Centre	Environmental	Shortlist	Victoria	British Columbia
Campbell River Organic Management Facility	Environmental	Request for proposals	Campbell	British Columbia
McLoughlin Point Wastewater Treatment Plant	Environmental	Preferred proponent	Capital Regional District	British Columbia
Surrey Biofuel processing Facility Project	Environmental	Financial close	Surrey	British Columbia
Saint John Safe Clean Drinking Water Project	Environmental	Request for proposals	Saint John	New Brunswick
Hamilton Biosolids Project	Environmental	Request for Expression of Interest	Hamilton	Ontario
Sudbury Biosolids Management Facilities	Environmental	Under construction	Sudbury	Ontario
Regina Wastewater Treatment Plant	Environmental	Under construction	Regina	Saskatchewan

Note: Table does not consider P3s currently in operation or where legal project owner is the provincial or federal government or a government related entity.

Source: Canadian PPP Project Database from Canadian Council for Public-Private-Partnerships as of April 22, 2015.

## Moody's Related Research

### Sector and Issuer Research:

- » [Construction Ahead: US Local Governments to Increase Capital Spending by 2016-17 \(1000310\)](#)
- » [Toronto: Operating and Capital Pressures will constrain future improvements in credit profile \(175259\)](#)

### Rating Methodology:

- » [Regional and Local Governments, January 2013 \(147779\)](#)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

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