NATIONAL BANK OF CANADA
FINANCIAL MARKETS

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Market View – Setting the record straight (on municipal finances)

By Warren Lovely

The financial health of Canada's local government sector has rarely been the subject of so much interest. For credit analysts and investors, boring is meant to be beautiful in muni land. But financial stability, long a hallmark here, has given way to exceptional (if temporary) fiscal stress, in some cases illuminating longer-term pressures. We've heard elected municipal officials—including some of our highest profile big-city mayors—use extreme language to describe their COVID-19 financial reality. A voice for Canadian municipal governments—the Federation of Canadian Municipalities—has likewise been blunt, urgently pleading for emergency funding from the federal government. Provincial governments—which constitutionally lord over the municipal sector—are monitoring the situation closely, with some having taken supportive action. Even our outgoing central bank governor has offered up a view on how to manage municipal liquidity pressures. (Hint: It has *not* involved the BoC buying muni bonds.) Meantime, we've lost count of the media articles written on the subject, which generally decry the fiscal state of play in various municipal jurisdictions, in some cases misreporting the facts along the way. Here, we try our best to set the record straight:

Q: Are municipal governments currently facing financial/cash flow pressures related to COVID-19?
A: No question.

Few (none?) would seriously argue the point. Various local government revenue streams have been impaired by virus-related shutdowns. Transit revenue is an obvious weak spot, but even for municipalities without large-scale public transit systems, parking revenue and assorted fee-based revenue streams have dried up. Toronto has the added risk related to land transfer tax revenue, given housing turnover has turned off. Meanwhile, spending pressures have emerged, most obviously related to public health. You'll see various numbers thrown around on the so-called "cash burn" or overall financial impact. Toronto, for instance, previously pegged the weekly impact at $65 million, multiplying to $1.69 billion on a half-year basis. Yes, that's simplified math and, as it stands, Toronto's *actual* weekly cash burn hasn't been as severe as the mayor first warned. Adding up estimated impacts in Vancouver, Calgary and elsewhere, the FCM puts the near-term gap at $10-15 billion. At about 5% of GDP, surely that's nothing to sneeze at, and a big enough hole to cause concern.

Q: With revenue down and spending up, this must mean municipal governments are running deficits right?
A: Actually, they're not.

Here's where we start to take issue with some media reporting. For example, some have incorrectly stated that British Columbia is now permitting its cities to run deficits. But that's simply not accurate. Yes, B.C. has provided exceptional relief for local governments, part of a broader COVID-19 action plan. But the province is *not* permitting/allowing deficits. Rather, affected local governments can, if necessary, borrow interest-free from existing capital reserves, subject to a requirement that any draw is repaid over five years. B.C. will also permit municipalities to extend "revenue anticipation borrowing" via BCMFA to two years vs. the regular one-year limit. Semantics? Not really. Deficits are verboten in muni land, being legislatively prohibited. This is a foundational element of municipal creditworthiness, and it remains intact. More precisely, municipal governments cannot plan for an operational shortfall. That means an unexpected loss of revenue, like we're seeing today, requires local governments to take remedial steps, including cost cutting. And should a municipality end the year with an operational shortfall, efforts *must* be taken to address it the next most immediate budget cycle.

Q: Why don't municipal governments just issue debt in the market to offset any cash pressures?
A: They're not legally permitted to do this.

A municipality is not a province, nor a sovereign. They can't simply undertake general obligation borrowing when they feel like it. Rather, there have always been, and remain, strict legislative limits around what a local government can (and just as importantly *cannot*) borrow for. Setting aside temporary draws from/repayments to reserves (which is more a cash flow strategy), municipal debt issuance is strictly limited to approved and fully costed capital spending, subject to hyper-specific bylaws with dedicated sinking funds nullifying refinancing risk. Moreover, the level of debt a municipality can take on is generally restricted to further ensure financial sustainability. Here, we're thinking of legislated and council-approved debt service requirements, which are held at very conservative levels (15% of the property tax levy in the case of Toronto). So even if a municipal council wanted to, they simply can't authorize tapping debt capital markets to paper over a temporary revenue-spending misalignment. Again, these restrictions/limitations on leverage have long been considered a credit strength for the sector.

Q: With budgetary constraints and limited recourse to term debt markets, are we about to see a wave of municipal defaults?
A: Despite the extreme language invoked by some municipal leaders, the answer here is 'no'.

First off, municipal budgeting is inflexible by design or more appropriately by provincial decree; legislation mandates that spending needs to be offset by planned revenue. Full stop. Moreover, municipal revenue streams are narrower than other levels of government, being generally less responsive to underlying economic conditions. But things have a way of deviating from plan. Pressures arise, natural disasters happen and, sadly, a global pandemic today rages. We won't speak to the motivation on the part of some mayors when it comes to invoking dire cash flow scenarios, although we can guess at the target audience. Meanwhile, some commentators point to ugly stats from the Great Depression, when Canadian municipal defaults weren't all that uncommon. And you can bet that whenever there's a major bankruptcy or event in the U.S. state and local government sector—and there have been some doozies—there's a tendency to question Canadian city solvency. But facts from the last half century tell a compelling story, if you let them. In addition to strong provincial oversight and limits on debt, municipal governments are, as a rule, *very* liquid. We recently explored the multiple liquidity buffers Toronto has at its disposal to help manage cash flow disruptions, even extreme stress like we're seeing today. And Toronto isn't really that unique. Across the municipal sector, liquidity ends up being quite a consistent and significant credit strength. Exceptional liquidity is equally a core underpinning for BCMFA, which is more akin to an infrastructure bank and shares many key similarities with top-rated SSAs in the Nordic region, Japan and elsewhere. In normal times, local governments don't typically draw on their abundant stores of liquidity, but when push comes to shove (or rather, when a virus infects your local economy) they can and will use cash balances, short-term funds, other reserves, credit lines and short-term borrowing facilities to meet their obligations. Moreover, some credit analysts (ourselves included) have tended to assume that, in the event of severe distress, provincial governments would likely provide the local government sector with extraordinary support(s). Which brings us to the next question…

Q: Are provincial governments paying attention?
A: It looks like it.

Canada has ten provinces, which conceivably means ten different approaches to managing local government financial stress. What have we learned so far? As previously noted, B.C. has moved to provide extraordinary support for its local government sector, deemed a first step as explicitly stated by the government. Again, we stress that this does *not* involve British Columbia cities running deficits. Instead, the plan allows for extra time to make remittances to the province, permits more flexible short-term/revenue-linked borrowing and enables interest-free access to billions of dollars in reserves (which must be repaid). Out on the East coast, Nova Scotia just announced a $380 million municipal loan program, designed to "bridge that gap so they can continue to deliver programs and services to Nova Scotians." Requiring individual council resolutions and subject to approval by NS Municipal Finance Corp., these short-term operating loans (set at a rate of 1.1%) will channel money to needy municipalities quickly. Municipalities will have to commence repayment after six months, paying the entire loan off in no more than three years. Elsewhere, provincial governments have rushed out exceptional fiscal stimulus and liquidity programs designed to limit the COVID-19 fallout on local and regional economies—measures and quick action that has generally been applauded by the local government sector. But as the economic and fiscal toll mounts, calls for additional help are rising and taking on more urgency. To us, provincial governments are (a) aware of the pressures on local governments and (b) generally sympathetic and desirous of a workable solution. So even where we've yet to see specific measures targeted at the local government sector, that may not be the end of the story. Simply put, Canada's policy response to the coronavirus is not closed off and munis may be one of the next big targets for action.

Q: What about the federal government?
A: They could (and should) do more to help.

Municipal governments may be creatures of the province, but the federal government is hardly a disinterested or impassive party here. Increasingly, federal leaders have come to realize that for our cities to deliver the growth and jobs we all covet, material support is needed. Most notably, that has meant transferring federal gas tax revenue to municipalities, alongside sizeable, predictable and longer-term federal commitments to cost-shared infrastructure spending. But what about support during this crisis? Well, if you thought the provinces were providing fiscal stimulus, just take a look at what Ottawa has committed to—both on the fiscal and monetary sides of the ledger. For a refresher, refer to our *COVID-19 Policy Update* report. Notwithstanding an unprecedented federal policy response to the virus, which will undoubtedly result in the largest federal deficit in the post-WWII period, there remain outstanding calls for big-time additional help for local governments. At the top, we noted the FCM plea for $10-15 billion in emergency federal funding for the broader Canadian municipal sector. That's a request that was just echoed in a fresh resolution from LUMCO—the Large Urban Mayors' Caucus of Ontario, which represents 29 of the province's largest cities. Trudeau's Liberals may well favour infrastructure when it comes to "investing" in local governments. Well then, how about a temporary boost in the federal share of capital funding, which would allow municipalities to divert the cash portion of capital plans to operations? There are other creative proposals out there. What say you Mr. Morneau? To us, there's long been a compelling argument for transferring excess fiscal capacity from Ottawa to other levels of government in Canada. We may be forced to acknowledge that there's less excess fiscal capacity than we once thought, particularly if our productive capacity ends up being more permanently impaired. But as we eventually see ourselves clear of this crisis, the need to address vertical fiscal imbalances in our broader public sector won't magically have disappeared. That could well entail shifting a larger share of Canada's general government revenue dollar to provinces and municipalities—the levels of government that, with all due respect, are closer to the people than the feds.

Q: Are municipal credit ratings at risk?
A: Not immediately and perhaps less than other orders of government in Canada. *[See Municipal Ratings Snapshot, next page]*

Disclaimer: We're not a credit rating agency. Nor do we have any inside track on rating developments. There's a new and healthy debate about creditworthiness in Canada, one most obvious in the corporate world where certain companies and industries are under immense strain. But the magnitude of the economic and fiscal hole faced by Canadian governments has created downside public sector rating risks too. Of the three orders of government in Canada, however, municipalities just might be the most insulated rating wise. Having driven so much of the fiscal response to the crisis, deficits and debt are surging the most at the federal level. There's a desire to rate through the cycle, but should rating agencies sense less-temporary/quasi-permanent damage to economic and fiscal tracks, Canada's much-ballyhooed AAA rating could be jeopardized. This is a separate discussion we've engaged in with greater frequency. Meanwhile, the provincial sector has long suffered from fiscal sustainability worries—pressures compounded by today's recession and, in some locales, made more acute by rock-bottom commodity prices and outsized revenue destruction. Munis may not be wholly immune, and those with larger public transit systems presumably face greater risk. It's noteworthy that BC Ferries was put on negative outlook by S&P Friday, owing to an unprecedented drop in ridership/deteriorating cash flows. At this point, the most likely catalyst for rating pressure at the municipal level would be via a permanent reduction in liquidity, as opposed to shorter-term draw on cash and reserves that many now foresee. We'd note that BCMFA was affirmed at AAA, stable by Fitch just last week, as unique taxing power and ample liquidity provide substantial flexibility.

Q: Do bond investors even care?
A: Yes, but they see value in the sector, particularly at today's wider spreads.

Full marks to bond investors, they tend to pick up on risks and issues long before they're reported on in the media. Indeed, most of the municipal bond investors we speak to are capable of seeing through politically motivated pleas for help. They likewise spot media misreporting as quickly as we do. That's not to say they're complacent or indifferent to the cash crunch faced by many local governments. Economic performance has faltered and financial pressures have emerged, of this there is little debate. That means those same investors require extra compensation… particularly at times, like these, when a premium is placed on liquidity. But ask yourself: are we seeing a legitimate buyers' strike in the municipal bond market? Not exactly. We won't overplay the importance of a single recent trade, but it is worth noting the strong demand in evidence for the City of Toronto's fresh offering: a C$200 million re-opening of a November 2029 maturity, bringing the total amount outstanding to C$600 million. Yes, it took a wider spread than pre-virus days (+116 bps vs. GoC | +30.5-31.0 bps vs. Ontario curve), but at barely 1.6% yield, our records indicate that was the lowest cost of borrowing for a 10-year financing by the City of Toronto—and likely for the municipal sector as a whole. And then there was BCMFA, which succeeded in placing a C$280 million Oct-2025 bond into a market riven with fear in late March. That trade, at +114 bps vs. GoC and +17 bps to Ontario, was the first syndicated deal since the start of the COVID-19 crisis and, like Toronto, was oversubscribed. Consider these deals something of a vote of confidence in a sector that—unlike federal crowns, provincials or corporates—hasn't been targeted for special treatment (i.e., secondary market bond purchases) by the Bank of Canada. That's good news, since we're now on the cusp of the traditional springtime, capital spending-driven muni bond issuance window.

Municipal Ratings Snapshot

Economics and Strategy

NATIONAL BANK OF CANADA FINANCIAL MARKETS

May 4, 2020

			Vancouver	Winnipeg	Niagara	Waterloo	Peel	York	Toronto	Ottawa	Montréal	Québec
Ticker	Government/authority type		City	City	Regional muni	Regional muni	Regional muni	Regional muni	City	City	City	City
	Province/region		British Columbia	Manitoba	Ontario						Québec	
	Bloomberg bond ticker		VANC	WINNPG	NIAGMU	WTRLOO	PEEL	YORKMU	TRNT	OTTAWA	MNTRL	QC
S&P	Long-term rating		AAA	AA	AA	-	AAA	AA+	AA	AA	AA-	-
	Outlook		Stable	Stable	Stable	-	Stable	Positive	Stable	Stable	Stable	-
	Short-term rating		A-1+	-	-	-	-	-	A-1+	-	-	-
	Stand-alone credit profile		aaa	aa	aa		aaa	aa+	aa	aa	aa-	
	Institutional framework		Very predictable & well-balanced — Applies to all municipal credits equally									
	Economy	20%	V Strong	V Strong	Average		V Strong	V Strong	V Strong	V Strong	V Strong	
	Financial management	20%	V Strong	Strong	Strong		V Strong	V Strong	Strong	Strong	Satisfactory	
	Budgetary performance*	20%	V Strong	Strong	V Strong		V Strong	V Strong	Average	Average	Average	
	Liquidity	20%	Exceptional	Exceptional	Exceptional		Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	
	Debt burden*	20%	V Low	Low	Moderate		Low	High	Moderate	Moderate	High	
	Date of rating report		13-Feb-20	15-Nov-19	8-Oct-19		16-Sep-19	29-Jul-19	21-Oct-19	16-Dec-19	1-Aug-19	
Moody's	Long-term rating		Aaa	Aa2	-	Aaa	Aaa	Aaa	Aa1	Aaa	Aa2	Aa2
	Outlook		Stable	Stable	-	Stable	Stable	Stable	Stable	Stable	Stable	Stable
	Short-term rating		-	-	-	-	-	-	P-1	P-1	P-1	-
	Systemic risk assessment		Aaa — Applies to all municipal credits equally, based on Government of Canada rating									
	Idiosyncratic risk assessment		1.94(2)	2.14(2)		2.01(2)	1.79(2)	2.24(2)	2.99(3)	1.86(2)	4.24(4)	2.97(3)
	Suggested Baseline Credit Assessment (BCA)		aa1	aa1		aa1	aa1	aa1	aa2	aa1	aa3	aa2
	F1: Economic fundamentals	20%	3.8	5.2		3.8	3.8	3.8	3.8	3.8	5.2	5.2
	Economic strength	70%	5	7		5	5	5	5	5	7	7
	Economic volatility	30%	1	1		1	1	1	1	1	1	1
	F2: Institutional framework	20%	1	1		1	1	1	1	1	1	1
	Legislative background	50%	1	1		1	1	1	1	1	1	1
	Financial flexibility	50%	1	1		1	1	1	1	1	1	1
	F3: Financial performance/debt	30%	2.25	2		2.5	1.75	3.25	1.75	2	5	4.75
	Gross operating balance	12.5%	1	1		3	1	1	1	3	1	1
	Interest payments	12.5%	3	5		3	5	7	3	3	9	7
	Liquidity	25%	1	1		1	1	1	1	1	5	5
	Net direct & indirect debt	25%	3	3		5	5	7	3	3	7	7
	Short-term direct debt	25%	3	1		1	1	1	1	1	3	3
	F4: Governance & management	30%	1	1		1	1	1	5	1	5	1
	Risk controls & financial mgmt	Max	1	1		1	1	1	5	1	5	1
	Investment & debt mgmt	Max	1	1		1	1	1	1	1	1	1
	Transparency & disclosure	Max	1	1		1	1	1	1	1	1	1
	Date of rating report		26-Nov-19	31-Jul-19		4-Nov-19	29-Aug-19	9-Oct-19	14-Jan-20	21-Oct-19	24-Jul-19	30-Sep-19
Other	Rating agency								DBRS		DBRS	
	Long-term rating | outlook								AA | Stb		A(High) | Stb	

			Municipal Finance Authority of BC	TransLink	First Nations Finance Authority
Ticker	Government/authority type		PSFA	Trans authority	PSFA
	Province/region		British Columbia		Canada
	Bloomberg bond ticker		BCMFA	SOUCOA	FNFACA
S&P	Long-term rating		AAA	-	A+
	Outlook		Stable	-	Stable
	Short-term rating		A-1+	-	-
	Stand-alone credit profile (SACP)		aa+		a
	Enterprise risk profile		V Strong (1)		Adequate (3)
	PICRA	40%	Strong (2)		Adequate (3)
	Business position	20%	V Strong (1)		Moderate (4)
	Management & governance	40%	V Strong (1)		Adequate (3)
	Financial risk profile		Strong (2)		Strong (2)
	Capital adequacy	40%	Adequate (3)		V Strong (1)
	Funding & Liquidity	60%	Neutral & Strong (2)		Strong (2)
	Support				
	GRE support		0		+1
	Group support		0		0
	Additional factors		+1		0
	Date of rating report		30-May-19		14-Aug-19
Moody's	Long-term rating		Aaa	Aa2	A2
	Outlook		Stable	Stable	RUR Positive
	Short-term rating		P-1	-	-
	Strengths		Strong instit'l framework (tax power, J&S liab'ty) / High quality loans / Substantial liquidity / Affordable debt burden	Access to diversified rev sources, taxing powers / strong governance & mgmt / strong operating results	Strong oversight & intervention power / growing reserve funds / solid governance, mgmt / strong perf, growing loan diversification
	Challenges		Single name & geographic loan concentration / Limited ability to earn +ve net interest spread	Very high debt burden supporting large-scale capital plans / capital projects subject to execution & financing risks	Rapid growth pressures reserve levels / modest track record
	Date of rating report		23-May-19	8-Oct-19	11-Jun-19
Other	Rating agency		Fitch	DBRS	
	Long-term rating | short-term rating | outlook		AAA | Stb	AA|R-1(Mid)|Stb	

Debt characteristics: Select (25) municipal issuers in descending order of marketable bonds o/s

	Number of issues/ lines	Outstanding book value	Debt due in <1 year	Weighted average term	Weighted average coupon
Ticker	#	$000s	$000s	Years	%
MNTRL	42	9,071,187	82,470	10.1	3.64
BCMFA	20	8,290,672	1,149,281	4.3	3.07
TRNT	19	7,350,121	5,595	14.5	3.46
YORKMU	18	3,371,786	201,215	8.9	3.46
SOUCOA	8	2,380,000	300,000	16.3	3.59
OTTAWA	31	2,337,465	49,323	23.2	3.88
QC	116	1,783,082	233,044	4.0	2.53
PEEL	55	1,668,799	31,187	14.3	3.92
VANC	10	1,050,000	125,000	10.2	3.43
WINNPG	5	1,047,568		25.7	4.53
WTRLOO	210	759,967	80,185	8.9	3.31
LAVAL	77	720,150	123,918	3.5	2.40
FNFACA	2	678,000		6.6	3.18
HALTON	71	480,594	46,754	14.7	3.22
NIAGMU	94	436,860	47,400	7.8	3.33
STJOHN	13	359,000	7,000	11.6	4.77
LONDON	51	237,891	45,200	3.4	2.82
DURHAM	108	190,952	27,242	5.5	3.79
HAMCTY	18	127,586	14,332	6.0	3.43
CITGUE	30	110,430	12,050	6.9	2.73
REGINA	7	101,848	4,086	21.6	3.87
SSKTN	16	78,742	9,617	14.3	3.97
WELLIN	86	60,718	8,675	5.5	3.47
TECUMS	18	47,553	2,905	15.6	4.59
MUSKOK	43	34,620	3,673	5.1	4.32

Note: Select credits, not complete muni universe; in some cases debt due <1Y includes revolving credit

Source: NBF, Bloomberg

Indicative pricing: Select municipal issuers

	Government of Canada curve	Ontario spread vs GoC	Range for primary municipal credits*		
			Spread vs ONT	Spread vs GoC	Indicative yield
Term	%	bps	bps	bps	%
5Y	0.36	61	15 - 31	76 - 92	1.12 - 1.28
10Y	0.53	85	20 - 37	105 - 122	1.58 - 1.75
20Y	0.98	104	30 - 48	134 - 152	2.31 - 2.49
30Y	1.08	99	31 - 49	130 - 148	2.38 - 2.56

Note: Constant maturity indications; muni basis a function of rating/liquidity & some may fall outside range

Source: NBF

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	Senior government ratings	Government of Canada	British Columbia	Manitoba	Ontario	Québec
Ticker	Bloomberg bond ticker :	CAN|CANRRB CANADA	BRCOL	MP	ONT OHYD	Q FINQUE|QHEL
	Bloomberg T-bill ticker	CTB		MPTB	ONTB	QTB
S&P	Long-term rating	AAA	AAA	A+	A+	AA-
	Outlook	Stable	Stable	Positive	Stable	Stable
	Short-term rating	A-1+	A-1+	A-1	A-1	A-1+
Moodys	Long-term rating	Aaa	Aaa	Aa2	Aa3	Aa2
	Outlook	Stable	Stable	Stable	Stable	Stable
	Short-term rating	P-1	P-1	P-1	P-1	P-1
DBRS	Long-term rating	AAA	AA(High)	A(High)	AA(Low)	AA(Low)
	Outlook	Stable	Stable	Stable	Stable	Stable
	Short-term rating	R-1(High)	R-1(High)	R-1(Mid)	R-1(Mid)	R-1(Mid)
Fitch	Long-term rating	AAA	AAA	-	AA-	AA-
	Outlook	Stable	Stable	-	Stable	Stable
	Short-term rating	F1+	F1+	-	F1+	F1+

Note: Refer to NBF's *Canadian Government Fact Sheet* and/or NBF's *Provincial Ratings Snapshot* for greater detail on the economic, fiscal, political, rating, spread environment for ALL provinces

Canada's institutional framework (as it relates to municipal credit)

Municipal credit ratings generally draw support from a sound institutional framework and in some cases build in "extraordinary support considerations". Senior government ratings (provincial and sovereign) are presented at left for reference. Below is a brief summary of how S&P and Moody's view Canada's institutional framework. We refer you to detailed rating reports/methodologies for additional information.

S&P — "We view the Canadian provincial-municipal intergovernmental system as being very predictable and well-balanced because of its maturity and stability, low-to-moderate degree of mismatching of revenues and expenditures, moderate levels of transparency and accountability, and strong likelihood of extraordinary support from provincial governments." / "Provincial-municipal relationships have proven to be more dynamic than the federal-provincial one, largely because the municipal governments are established through provincial statute and not through the constitution." / "Provinces mandate a significant proportion of municipal spending and, through legislation, require municipalities to pass balanced operating budgets (although they also provide operating fund transfers). Nevertheless, municipalities generally have the ability to match expenditures well with revenues, except for capital spending, which can be intensive for some." / "The provinces have an established history of assisting their distressed municipalities through grants."

Moody's — "The institutional framework governing municipalities... is mature and highly developed. The division of roles and responsibilities between the province and municipalities is clearly articulated. Historically, changes to the institutional framework have occurred at a measured, evolutionary pace, following discussions between both parties. Nevertheless, in certain cases, changes have occurred more rapidly." / "[municipal] creditworthiness benefits from the stability inherent in the provincial institutional framework. Provincial legislation dictates a high degree of oversight, including limits on debt servicing costs, while policy flexibility, on both the revenue and expenditure sides of the ledger, helps [municipal governments] to manage pressures as they arise. We note that debentures can only be issued to fund capital infrastructure projects."

Notes to the table

Sources: NBF, S&P, Moody's, DBRS, Fitch.

This table aims to summarize the credit ratings, outlooks and key ratings rationale for select Canadian municipal governments and related regional/transporation/aboriginal authorities.

We have included the outlook on each long-term rating and have highlighted in RED where an outlook is either positive or negative; RUR refers to Rating Under Review.

In general, we have adopted a "heat map" approach on page 1, highlighting in GREEN relatively positive rating factors and highlight in RED those factors that may be contraining the rating or leading to downside pressure.

In some cases, we present the qualitative assessment as per a given credit rating agency, while in other cases we've presented "scores". Where possible, we've included weights to illustrate relative importance of a given factor.

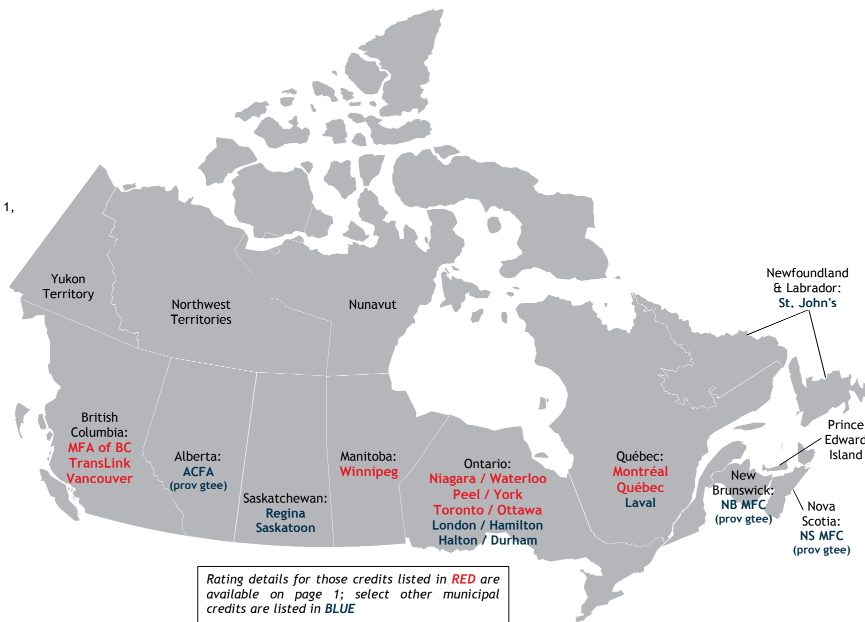
Generally speaking, we have based our summaries on the latest detailed rating report or credit opinion. Where those rating reports/credit opinions are older than 12 months, we have highlighted the date in RED.

Refer to individual rating reports for detailed rating considerations, basecase forecasts and identified risks.

All credit ratings are subject to certain limitations and disclaimers, available via each credit rating agency's website.

S&P

Refer to S&P for detailed methodology, which can vary depending on the credit.
For the cities and regional municipalities listed in the top half of page 1,
we have summarized the "key rating factors" as identified by S&P. That includes the
"instituational framework" and multiple factors comprising the "individual credit profile".
Under S&P's 2019 methodology, individual credit profiles are now made up of five factors,
with budgetary performance and debt burden each combining what had been two sub-factors.
For these governments, related methodology includes:
> *Methodology For Rating Local And Regional Governments Outside Of The U.S. (15-Jul-2019)*
> *Analyzing The Liquidity Of Non-U.S. Local And Regional Governments And Related Entities And For Rating Their Commercial Paper Programs (15-Oct-2009)*
For the PSFAs & regional/transportation/aboriginal authorities listed in the bottom half of page 1,
we have summarized noted strengths/challenges based on the latest rating reports.
For these authorities, related methodology includes:
> *Public-Sector Funding Agencies: Methodology And Assumptions (22-May-2018)*
> *Rating Government-Related Entities: Methodology And Assumptions (25-Mar-2015)*
> *Rating Finance Companies (18-Mar-2004)*



Moody's

Refer to Moody's for its detailed methodology, including:
> *Rating Methodology: Regional and Local Governments (16-Jan-2018)*
> *Rating Methodology: Government-Related Issuers (21-Aug-2017)*
For the cities and regional municipalities listed in the top half of page 1,
the methodology considers municipal governemnt ratings to be a function of two key factors:
the government's Baseline Credit Assessment (BCA) and the likelihood of
extraordinary support from another entity in the event of acute liquidity stress.
Each government's BCA incorporates an "idiosyncratic risk score" and "systemic risk".
We have summarized the scores (from 1-9) and included the relative weights for each
of the four main rating "factors", denoted F1 to F4.
The "systemic risk assessment" reflects the sovereign's rating ('Aaa').
For the regional/transportation/aboriginal authorities listed in the bottom half of page 1,
we have summarized noted strengths/challenges based on the latest rating reports.

DBRS

Refer to DBRS for detailed methodology, including:
> *Rating Canadian Municipal Governments (15-May-2019)*
As per DBRS' *Corporate Risk Assessment Scorecard for Canadian Municipal Governments* (3-Jul-2019):

	Issuer rating	Trend/ outlook	Primary Business Risk Assessment (BRA) Factors				Primary Financial Risk Assessment (FRA) Factors				Additional factors
			Eco structure	Fiscal mgmt	Debt mgmt	Gov't relations	Debt per cap	Debt/assessment	Interest bite	CAPEX/revenue	
City of Toronto	AA	Stable	AA(high)	AA(low)	AA	AA	AA	AA(high)	AA(high)	BBB(high)	None
City of Montréal	A(high)	Stable	AA(low)	AA	AA(low)	AA(high)	A(high)	A(high)	AA	BBB(high)	None
TransLink (SCBCTA)	AA	Stable	AA(high)	AA(low)	AA	AA	AA	AAA	AA(low)	AA(low)	None

Fitch

Refer to Fitch for detailed methodology, including:
> *Rating Criteria for International Local and Regional Governments (9-Apr-2019)*

Compiled by National Bank of Canada Financial Markets

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