



Capital
Markets

2022 Municipal Treasurers Roundtable

DECEMBER 2022

TABLE OF CONTENTS

03		Panelists & Moderators
04		Municipal Treasurers Key Themes
05		Financial Performance and Inflation
08		Real Estate and Immigration
10		Municipal Budgeting and Policies
13		Municipal Borrowing
15		ESG and Sustainable Finance Initiatives
19		Select Canadian Municipal Issuers
21		Select RBC-Led Transactions in 2022

ISSUER REPRESENTATIVES



Matthew O'Rae
Chief Financial Officer,
Municipal Finance
Authority of BC



Heather Taylor
Chief Financial Officer
and Treasurer,
City of Toronto



Craig Dyer
Chief Financial Officer,
Region of Waterloo



Laura Mirabella
Commissioner of Finance and
Regional Treasurer,
Region of York

RBC ECONOMIST



Rachel Battaglia
Economist, RBC Economics

MODERATOR



Mansoor Khan
Director, RBC Government
Finance

MUNICIPAL TREASURERS KEY THEMES

- 1 Cautious Outlook:** Municipalities are approaching the 2023 budget planning process with higher inflation, interest rates, immigration and shelter program spending top of mind. Municipalities benefited from the economic rebound in Canada but are cautious about a recessionary environment in the upcoming year, as it could lead to higher operating costs to support social services, shelter systems and public health programs which could place more burden on municipalities.
- 2 Support from Federal and Provincial Levels of Government:** Canadian municipalities had a significant amount of monetary assistance from the Federal and Provincial levels of government throughout the pandemic. These COVID related funding are likely starting to dial back in the upcoming year and municipalities with large transit systems who received extra support during the pandemic are anticipated to incur higher operating costs in 2023.
- 3 Transit:** Municipalities with responsibility for transit saw an increase in ridership compared to last year, however not all saw a recovery back to pre-pandemic levels due to the new hybrid work environment. Regions with stickier ridership such as students have seen more of a bounce back. In addition, the volatility in the commodities market also had an adverse impact to the cost of transit this year, with some municipalities noting each cent of fluctuation in gas prices costs the municipality thousands of dollars. Transit operators will continue to experience headwinds based on what the “future of work” will look like, as well as unpredictable gas prices.
- 4 Interest Rates:** A topic affecting individuals around the globe, municipalities noted that there are a few areas affected as a result of the higher rate environment. Firstly, there have been delays or pauses in housing development within cities due to higher interest rates, which is pushing housing and rental prices up on the back of Government of Canada’s target of half a million immigrants each year by 2025. Secondly, a recession will cast additional impacts on City services with higher expenses on subsidies, food banks and shelter systems, which would put pressure on municipality budget. Canadian municipalities are not permitted to budget for operating deficits and must plan to cover any unforeseen shortfalls in their operating budgets within a year.
- 5 Borrowing Programs:** Canadian municipalities continue to offer investor’s attractive value relative to other government credits as local governments must balance their operating budgets. There was a total of C\$4.7 billion in Canadian municipal issuance in 2022, moderating from the record high of C\$5.9 billion in 2021. MFABC is expected to increase their funding needs in 2023 due to refinancing after a slightly lower 2022, and Toronto having increased their borrowing from C\$1 billion to C\$1.2 billion last year is expected to continue issuing similar terms next year. Issuers such as Region of York who remained on the sidelines in 2022 are expected to return to the market in 2023, and Region of Waterloo who have been a consistent issuer in the space will return to the market in spring as well. Large Canadian municipal issuers are expected to continue to focus on 10-year, 20-year, and 30-year bullet maturity issuance, while smaller municipal issuers are expected to issue via 1-10 year and 1-20 year serial debenture issuance.
- 6 ESG:** The market continues to evolve with more issuers looking to update or create new ESG frameworks to include social use of proceeds in addition to green use of proceeds. The ESG performance report published by City of Toronto has served as a great example for other municipalities to follow in the coming years. Investors continue to show solid demand in ESG issuances and while it may be difficult to quantify the relative pricing benefit given volatile markets, it is clear that these labeled bonds have been very well oversubscribed allowing issuers to upsize their transactions.

FINANCIAL PERFORMANCE AND INFLATION

Mansoor Khan (RBC): I would like to welcome you all to RBC's third annual Municipal Treasurers Roundtable Conference. There are several interesting topics related to the municipal sector that we will be discussing today with our esteemed panelists which include Heather Taylor from the City of Toronto, Craig Dyer from the Region of Waterloo, Laura Mirabella from the Region of York, Matthew O'Rae from Municipal Finance Authority of British Columbia ("MFABC"), and Rachel Battaglia from RBC Economics.

Perhaps before we begin our round of questions from the treasurers, I would like to start with you Rachel. Can you please provide an overview of how you see the economy as it stands today and what are some of the notable challenges that the provinces are facing, which can potentially impact municipalities in the coming year?

Rachel Battaglia (RBC Economics): Thanks for having me everyone, my name is Rachel Battaglia, I'm an economist at RBC. In terms of the macroeconomic outlook for Canada, this year is shaping up to be a bit of a mixed bag. 2022 started off quite strong with many provinces feeding off rock bottom interest rates and the reopening of the economy after a series of lockdowns. Areas in Ontario and BC in particular inherited robust demand and a booming housing market from 2021, sustaining strong GDP growth in the first quarter of the year. That narrative, however, did start to shift after the Bank of Canada began its rate hiking campaign in March - raising interest rates 3.5% (at the time of the roundtable) just this year. As we've seen, higher rates have put a damper on consumer spending and investment; as such, we're expecting economic growth in Canada to moderate this year from the 5.0% reported in 2021.

Although we've seen the economy start to soften, it's been more resilient than anticipated. Q3 real GDP figures for Canada were released recently, reporting another quarter of positive growth and an annualized growth rate of 2.9%, which again, was stronger than many were forecasting. Most of that growth was coming from a rebound in net trade and another inventory build so we're still expecting to see economic activity slow further in upcoming quarters, bringing us into a mild recession in early 2023.

Tension in the labour market will likely cushion employment from reaching typical cyclical lows.

Rachel Battaglia, RBC Economics

On the inflation front, price growth is still top of mind. Inflation has been a bit more stubborn than folks at the Central Bank were probably hoping. Although CPI growth has started to come down slowly, it still looks like it's going to be at least another year before

we get back to that targeted 2% territory. With that in mind, at RBC we are projecting another 25 basis point rate hike next week, bringing us to a terminal rate of 4%. There is some upside risk to that projection and a 50 point increase is certainly still on the table but a 25 point increase remains our base case.

With the recessionary period ahead, we're also expecting to see employment contract, so social services at the municipal level might feel a bit more strained. However, labour markets are still quite tight. That tension in the labour market will likely cushion employment from reaching typical cyclical lows, and might also buffer from a dramatic overburdening of those municipal services.

On the housing front, we are in the middle of a correction. Home prices and resales are likely to continue declining next year - although there have been early signs that the rate of decline has started to level off somewhat. We're expecting to see the largest declines to come from some of Canada's most expensive markets in Ontario and BC where home prices saw some of the largest gains in the country over the last two years. Given affordability issues tend to force Ontarians and residents of BC in particular to park a large share of their wealth in housing, homeowners in those provinces will likely see a chunk taken out of their net wealth as the real estate market continues its decline. That of course will draw in household consumption, making the recession a bit more pronounced in those two provinces than elsewhere in the country.

Even with home prices coming down, high interest rates are continuing to put pressure on affordability. Stubborn inflation is expected to keep interest rates in restrictive territory for the entirety of next year. On top of that, home prices are only expected to drop about 14% nationally, which won't completely undo the gains that we've seen over the last two years. With those forces at play, affordability is expected to remain stretched for the next little while, which will be felt at the municipal level given a lot of housing related supports fall there.

It's important to note the depth of the recession in the US, China's zero COVID policy, and the conflict in Ukraine are all recognized risks to the outlook I just described, but at this moment in time, that's the landscape that we're projecting for next year.

Mansoor Khan (RBC): Thanks for that Rachel. It would be interesting to hear about the financial performance from the Treasurers joining us in this panel as it relates to specific municipalities and regional districts. Maybe we can start off with you Heather. How have you seen Toronto's financial performance play out last year? During the pandemic, we had a lot of challenges. What would you say are the most notable impacts that you're feeling right now because of what happened two years ago? We can turn it over to Laura and Craig after your response.

Heather Taylor (Toronto): That's a big question, because there's a lot of different aspects. If we look at just the economic recovery, I would say that the City's biggest impact from COVID was a decline in its transit system. The fare box was dramatically impacted. We have seen a return of some ridership, but we are still well below pre-pandemic levels. We don't truly understand what ridership will look like. In 2022, we were hoping to get to about 80% of pre-pandemic levels. We are stuck in the high 60s, maybe 70%, so is that the new norm with hybrid work? It really is hard to say, especially with new waves of viruses coming out in the tail end of the year, so we are anticipating that to continue into 2023.

Other massive impacts on 2022's financial performance stem from COVID-related pressures such as transit as I mentioned, but also our shelter program. I think COVID was a catalyst for the vulnerable homeless population. Pre-COVID days, we had around 6,000 shelter beds a night. We are actually budgeting for 2023 to have 10,000 shelter beds a night, and we're well over 8,000 currently. Some of that pertains to the immigration policies in the sense of the refugees, the borders being open, and the Ukrainian situation. I'd say that about 2,200 beds a night are specifically refugees. These are the two main drivers on the city's finance that stem from COVID.

Municipal Land Transfer Tax ("MLTT") would be another financial performance item that is linked to the economic cycle. With the housing market softening, the fear was that it would dramatically impact our budget. Thankfully, a few years ago, we actually pivoted and split our MLTT up by dedicating a portion funding the operating budget and a portion funding our capital plan, so we've insulated ourselves to some extent on the softening of the real estate market. That would be another aspect of the financial performance, but I think we're managing okay.

Laura Mirabella (York): The situation's slightly different in York Region and other regions because we're an upper-tier municipality, we don't have the same pressures as Toronto. Our council did choose to put forward a relatively low tax levy increase last year, as it was under 2%. We did continue to have pretty significant COVID-related costs, but the reduction in our transit ridership recovered a bit more quickly than Toronto's in terms of revenue. We are expecting to finish the year within our overall budget, as we don't have the same levels of pressures, but we're still having some of those pressures. There is more demand in our shelter services and public health services, so we are continuing to have to reallocate resources internally to meet some of those increased COVID costs.

We have had to look really closely at our transit services to try and align the service levels to demand, but we still have a gap because we must continue to offer some of those services, whether the ridership is there or not, because you can't actually bring the ridership back unless the service is there to begin with. We were really impacted by inflation, we had projected inflation just under 3%, but it was around 7% last year, impacting us in terms of contract renewals and similar issues.

On the capital side, it impacted us more. We have a very ambitious capital program, and we were experiencing inflation of 16 to 17%. On the other hand, some of the other factors that were happening in the economy in terms of labour shortages and supply chain issues made it so that we're actually only going to achieve about 75% of our capital plan in 2022. As a result, some of those inflationary pressures have been absorbed within the overall capital envelope.

There is more demand in our shelter services and public health services, so we are continuing to have to reallocate resources internally to meet some of those increased COVID costs.

Laura Mirabella, York

Craig Dyer (Waterloo): My response is going to be very similar to parts of Heather's and Laura's. I think the two areas that were most impacted due to COVID were also transit and our homeless shelter system. Our transit recovery has been a bit of a different story – as of October, we hit pre-COVID ridership levels, and we attribute that to a great extent to our student population here in Waterloo region between the University of Waterloo, Wilfrid Laurier University, and Conestoga College. While transit ridership has bounced right back with people returning to class in-person, this is also putting great pressure on our service levels at a time when inflation and the price of diesel fuel remains very high. We're at the early stages transforming our fleet of buses from diesel to zero-emission electric. We have 270 diesel buses and the price of diesel is 60 or 70% higher than what we budgeted in 2022.

Impacts on the homeless shelter system have also been significant for us, as the delivery model for shelters changed due to COVID and it's not going back. We have added system capacity and millions of dollars to our homelessness budget. And we are proposing to add more next year, at a time when provincial funding in the form of the Social Services Relief Fund is expiring.

My other comment would be on our capital program – while CPI gets the headline every month, we don't buy what a consumer buys and we are impacted by cost inflation in a variety of ways, whether it is service contracts, collective agreements, or capital projects. Project tenders are coming in anywhere between 20 to 50% over what we budgeted. Trying to deal with that has been our third most significant challenge.

Mansoor Khan (RBC): Heather, maybe you can also comment on the inflation impact for the City of Toronto, as Craig and Laura just commented on that.

Heather Taylor (Toronto): On the capital plan side, I completely agree with everything my colleagues have just said. Projects are

coming in, and we know that inflationary pressures are being triggered by the COVID supply chain issues, the Ukraine crisis as well as a competitive labour market that we haven't experienced in decades. It's very challenging to actually find the skilled workers, so that's all driving the prices up. The other element that I'd like to point out is just with increased interest rates, as we go into our very large capital plan, it is partially funded by debt, and we have financing ratios that we need to stay in compliance with.

Some local governments are still flushed with that higher level government support that came in during COVID. They're funding some of their capital expenditures with cash as a result instead of debt.

Matthew O'Rae, MFABC

When interest rates go up, we're able to finance less, so to keep our capital plan balanced we need to revisit our capital projects and adjust available funding for investments. The headwinds on the capital plan are being triggered by the inflation that we're experiencing in contracts and projects, but also by the increased interest rates. Our debt available to fund our capital plan is lower. That has had an impact on 2022 and will continue to have an impact in future years. As we go into the public bond market, the bonds we're issuing are for multiple years, 10, 20, or 30 years, so we're going to be carrying some of these higher interest rate debt for years to come.

Laura Mirabella (York): If I can just add on top of that, depending on what you're using debt for, it impacts the capital projects. In the case of York Region, most of our asset management is meant to ensure our existing assets are in a state of good repair, and necessary repairs are funded from the reserves that we've been building up over the last little while. But we fund our growth-related capital from debt. As interest rates have risen, and we've had to be a bit closer to the line in terms of the new financing we can put out each year, if we need to slow down our growth-related capital, that impacts the availability of housing for all those new immigrants that are coming in.

Mansoor Khan (RBC): Rachel, the market is expecting Central banks to do whatever it takes to try to bring inflation back down to under 2%. How do you see the current chances of the central banks being able to do so in the coming year?

Rachel Battaglia (RBC Economics): Many components of the Canadian economy have been slow to react to interest rate hikes. Despite raising rates, economic growth and employment have held relatively strong and inflation has remained a bit stubborn. Geopolitical tensions in Ukraine have put upward pressure on commodity prices and China's zero COVID policy has continued to

test supply chains. With CPI growth expected to reach nearly 7% this year, we are forecasting inflation to remain high for all of 2023 – easing up to just over 2%, by Q4. As such, rates are likely to remain in restrictive territory for all of 2023 as well. Clearly everything is a moving target but, at this point, we're not projecting any rate cuts from the Bank of Canada before 2024.

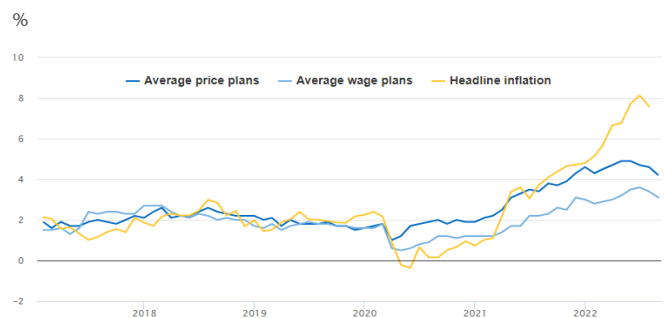
Mansoor Khan (RBC): Moving to the west coast, Matt, from your perspective, what are you seeing from the MFA members? Any interesting trends as it relates to the finances for the borrowing municipalities?

Matthew O'Rae (MFABC): One of the things we're seeing here is somewhat reduced activity in our short-term loan program year over year. Among the reasons this is happening is that some local governments are still flush with that higher level government support that came in during COVID. They're funding some of their capital expenditures with cash as a result instead of debt. I think the other thing, just to echo what Craig, Laura, and Heather touched upon, is that supply chain pressures and labor issues are leading to slower spending. On the other hand, construction inflation is clearly off the charts, and our members are reporting exactly what Craig alluded to, with tenders coming in at 20% to 50% over budget, leading to some projects being scaled back or postponed altogether.

Overall, it's causing our members to reevaluate some of their priorities and slow their capital expenditure plans as Heather and Laura alluded to, that interest bite and serviceability really adds additional pressure. Other trends that we are seeing echo a lot of what you've heard from my counterparts so far.

I'll touch on a couple more themes here. Some of them are a bit repetitive, but without a doubt, there's a continued focus on infrastructure expansion and renewal, as we've heard from Heather and Laura. That's top of many local governments' priority list right now in British Columbia. They're really working hard at incorporating climate adaptation and risk strategies into their infrastructure asset management plans. We've seen a big focus on that piece. We've talked about soaring construction costs and where tenders are coming back, so we've been working closely

CANADIAN CPI AND BUSINESS WAGE/PRICE PLANS PEAKING



Source: StatCan, CFIB, RBC Economics

with local governments to layer on efficient debt financing strategies and investment alternatives for long-dated capital reserve requirements to ensure they are best protected against inflation.

Some of the larger municipalities talk about housing affordability and strains in healthcare and public safety demands. We're really encouraged by Premier Eby's comments at his recent swearing in ceremony to devote additional resources to these areas, but as everyone knows, they are not easy problems to address.

If we're going to see a deterioration anywhere, although we're in a good position of strong reserves and historical surpluses, I think the discretionary services will be impacted up front. We tended to see that during the pandemic, households tightening their finances. Some of the recreation centers may very well be some of the first areas that we see a weakness in for example. I think the last thing I'll comment on is wage inflation. Some of the local governments are in the middle of negotiating some of their contracts with their unionized workforce. We'll certainly see upward pressure on labor expenditures that will require offsets to balance budgets.

REAL ESTATE AND IMMIGRATION

Mansoor Khan (RBC): Building on your comment about housing Matt, are there any notable observations you have seen on the real estate market in British Columbia? And would that have any potential impact on the borrowing members?

Matthew O'Rae (MFABC): Activities slowing, there's no doubt. Maybe we're at a floor here. There is clearly subdued demand as purchasing power has been eroded due to interest serviceability and increased inflation on other essential items such as food and energy. Perhaps there's still some more weakness to come. We're obviously monitoring that closely, but the labour market has been extremely resilient. Our medium and long-term outlook on housing in the province is still very strong, supported by population growth both from within Canada and through immigration. Property tax collection rates remained extremely high during the pandemic. We're not expecting any material impact on our members nor are we expecting it to have any impairment on their loan serviceability.

Mansoor Khan (RBC): Turning it over to the other panelists to comment on the notable observations related to the real estate market in their respective regions starting off with Laura?

Laura Mirabella (York): I very much agree, we have not seen any real delinquency in terms of property taxes. As a region, we're accepting property taxes from the locals, but our locals haven't been experiencing losses. In the first year of the pandemic, we made an arrangement with our local municipalities to allow them to defer submission of the property taxes to the region so that they could provide a deferral program to their residents to manage the uncertainty around the pandemic, and we actually found that it wasn't really necessary. People will pay their mortgage and their property taxes first, and as a result, that hasn't been a major pressure for us.

Craig Dyer (Waterloo): Specific to the real estate question, I would concur with Laura. We had the exact same experience here in Waterloo Region, we put the same deferral options in place which did not need to be exercised, as the vast majority of tax payments were still being made.

Laura Mirabella (York): I was just going to add, on the capital side, what we did notice, 2021 was a real slow down in the pulling of permits, but that has recovered. Where our development charge collections were lower than we had anticipated in 2021 and 2020, 2022 has actually been higher than we forecasted. As at the end of October, we have already exceeded our forecast for the year, so those permits are being pulled at a faster rate than expected – they've really recovered.

We put the same deferral options in place which did not need to be exercised, as the vast majority of tax payments were still being made.

Craig Dyer, Waterloo

Heather Taylor (Toronto): The City of Toronto's experience is very similar to what my colleagues have said. From a city perspective, we too offered a deferral program by the end of the year, but our delinquency was no different than any prior COVID year. It is nice to hear that it is a common experience across different jurisdictions. With regards to development, we were seeing some particular developments actually paused, not because of the city, but because of interest rates. The interest rates were impacting developers' rate of returns, and we were seeing certain projects paused. We too, were looking at specific projects where we were partnering with the development community for affordable housing. The business case has to be there, it has to be driven by the amount of market rents, but the market rents did fall off during COVID, and they have rebounded as we all know from the news. I think there's different elements: the interest component, the market component, and the development pent up demand aspect. Where you make positive gains in some areas, you're being restricted, or you're seeing some potential deferrals for other reasons.

With regards to development, we were seeing some particular developments actually paused, not because of the city, but because of interest rates.

Heather Taylor, Toronto

Mansoor Khan (RBC): Thanks for your valuable insight. The real estate market is always at the forefront of investors' minds when it comes to the Canadian market. Immigration of course is also a significant contributor to the rise in housing prices that we have experienced over the last number of years.

Rachel, we understand that Canada has ambitious immigration targets in the years ahead. How do you see that impacting the Canadian economy as a whole? Also, which municipalities or regions will see the most meaningful impact from it?

In the near-term, the uptick in unemployment and Ottawa's increasing immigration targets will provide some temporary relief to the crunched labour market.

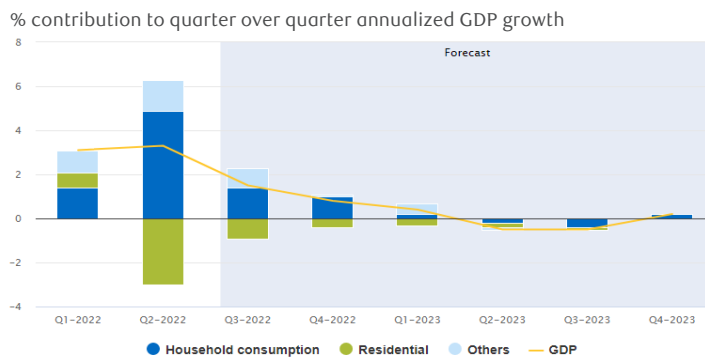
Rachel Battaglia, RBC Economics

Rachel Battaglia (RBC Economics): Labour shortages have held back growth in many areas of the country over the last two years. And that speedy economic recovery put a real strain on businesses which struggled to find the skilled workers they needed. In the near-term, we are expecting a slight uptick in unemployment given the upcoming recession; we also know Ottawa is upping immigration targets to make up for the last few years. Both of those factors will undoubtedly provide some temporary relief to crunched labour markets in the short-term. But fundamentally, we're up against an aging population. We're already seeing the baby boomer generation start to retire in droves and Canada's skilled workforce isn't being replaced quickly enough.

Additionally, we're seeing a dispersion of international immigrants across the country, which is a change from historical patterns. Newcomers in the past would settle in urban areas of Ontario by far and large, now we're seeing unprecedented levels of international migrants settling in the Maritime Provinces instead. Cost of living is no doubt a driving force of that shift, and with affordability being the pressure point that is it in Ontario and BC, I think it's likely that we'll see that dispersion of migrants across the country continue moving forward.

From a municipal perspective, there are a lot of services that municipalities are responsible for: EMS, housing supports, recreation, etc. Any large influx of people will add strain to those services, and in order to keep them efficient and available to serve a growing population, it takes diligent planning and the proper investment. On top of that general influx, I expect municipalities to see a strain on services that are used disproportionately by newcomers to Canada. Ottawa is targeting almost half a million immigrants every year until 2025, and we're on track to hit those targets. With the dispersion of newcomers across the country, I suspect municipalities out east will face more of a shock than anywhere else, given they just aren't used to seeing these levels of in-migration. That said, the absolute number of newcomers is going to expand across the board. Even though some areas of the country might see their share of the pie shrink, the absolute number of immigrants is growing, and that's going to increase demand for services and the need for infrastructure across all municipalities.

HOUSING AND SPENDING SLOWDOWN TO DRIVE LOWER GROWTH



Source: StatCan, RBC Projections

MUNICIPAL BUDGETING AND POLICIES

Mansoor Khan (RBC): Rachel, you touched on this topic earlier but if you can elaborate a little bit on your views as it relates to the potential recession that the market is expecting next year. In terms of the official RBC forecasts, do we have any views on how long, and how mild you expect it to be?

Rachel Battaglia (RBC Economics): The upcoming recession is expected to rank among the mildest in the country over the last 70 years – certainly less severe than the 2008 financial crisis. And tight labour markets are a major contributing factor to our expectation for a shallow recession. Employment strains have been a real hindrance to economic growth in recent quarters; and, although those labour market tensions might ease in the year ahead, employment is unlikely to reach its typical cyclical lows next year.

The upcoming recession is expected to rank among the mildest in the country over the last 70 years – certainly less severe than the 2008 financial crisis.

Rachel Battaglia, RBC Economics

Mansoor Khan (RBC): Thanks Rachel. Going back to you Matt, municipalities are in the midst of their budgeting period right now. How much of a concern is a potential recession next year for you? Perhaps others can also opine on it after.

Matthew O’Rae (MFABC): BC consumers are quite levered with both consumer and mortgage indebtedness, of which, a portion is floating rate. The unprecedented speed of rate hikes is going to be felt and a mild recession is probably inevitable as Rachel alluded to. There is no doubt interest rates are going to have an impact on the consumer and the housing market. But the Province’s economy is quite well diversified from an economic exposure perspective and MFA itself has never experienced a loss through any other historical periods of economic weakness. We don’t foresee those tighter economic conditions materially impacting our clients, their loan book, and their ability to service those obligations. The majority have ample reserves and have shown their ability to right size their budgets as needed. Property tax collections in the province have always been very stable even during economic contractions and recessionary periods.

Craig Dyer (Waterloo): It’s hard to know where to start. It feels like a perfect storm in some respects. Everything we’ve talked about so far in terms of impacts in 2022 are our most significant budget factors going into 2023 as well. In no particular order: inflation and cost escalation, fuel prices, the need for programs for people experiencing homelessness, transit service recovery, higher interest

rates, and the public expectation that as municipalities we are going to address complex social problems in the absence of long term stable funding. All of this is impacting our 2023 budget, both operating and capital, at a time when there is an expectation of a recession, and housing affordability remains out of reach for huge segments of the population. And we have recently come through a municipal election. In our case, we have a Regional council with over 50% turnover from last time, and we are working with our new council to bring them up to speed on this myriad of economic and service level related issues. For me as a municipal treasurer, this is likely the hardest budget I’ve ever done - I just can’t think of another budget that has had that significant mix of material impacts all at once. Budgeting over the last 10 years has been done in an environment of relatively low and stable inflation and historically low cost of borrowing. And this has changed dramatically over the last 12 to 18 months. So we are in a highly unusual situation which is creating immense pressure on municipal budgets next year.

Heather Taylor (Toronto): As it relates to the budget, we are contemplating continued inflation. Craig had mentioned earlier the cost of fuel. Just to contextualize it for the city, when the price of gas goes up a penny, it’s a C\$750,000 impact. For example, we know there’s a worldwide shortage of diesel, and with a potentially 50 to 70 cent rise in the diesel price, translates into C\$37.5 to C\$50 million more for the city. That’s over a one percent tax rate increase just to deal with fuel pressures, never mind growth and inflationary impacts of everything else, so we’ve tried our best to build in what we anticipate.

The unprecedented speed of rate hikes is going to be felt and a mild recession is probably inevitable.

Matthew O’Rae, MFABC

I think, if there is a recession, we will see additional impacts on city services. In many instances, we offer programs that are subsidized if you meet certain thresholds. And I would suspect that history shows during recessions, more families and individuals meet the thresholds that qualify them for those programs. As a result, there could be an increased demand on city programs, and that obviously puts pressure on keeping a balanced fiscal budget.

Laura Mirabella (York): With respect to our operating budget and particularly COVID support, I realize I’m incredibly lucky to be the treasurer of a region that is actually relatively affluent. While we are adjacent to the City of Toronto, we haven’t had as severe COVID related social service pressures. So we do continue to have incremental public health pressures and the issues around transit

ridership, for us it's a relatively modest C\$160 million that we have in our 2022 budget, and we expect it to be roughly the same next year, of which close to half the province has committed to funding.

Mansoor Khan (RBC): Craig, you mentioned absence of provincial funding. That was obviously a big factor in terms of the support municipalities received during the pandemic. What are your expectations as it relates to provincial support going forward and perhaps on a related topic, your thoughts on the impact of Bill 23? Will turn it over to the other panelists to opine on that after as well.

Craig Dyer (Waterloo): It appears we are seeing the end of COVID-related provincial funding for transit as we head into 2023. More of an issue for Waterloo Region is the expiry of the Social Services Relief Fund at the end of 2022. We have used this fund to help offset higher operating costs associated with a number of new and expanded homelessness programs that we have put in place. This is creating an added impact for us from a property tax levy perspective in 2023. I think we're still optimistic that some COVID funding will continue for public health, perhaps for long-term care and for paramedic services, but these represent a much smaller risk exposure to us going forward.

Bill 23 is of immense concern to me and my colleagues on this call. That bill has now received Royal Assent, and we are waiting to see the regulations. The challenge for municipalities is that we have a limited number of revenue sources to pay for new capital infrastructure. We have development charges, property taxes and water/wastewater rates. If the Province is going to slow down the flow of development charges, then municipalities will have to either slow down infrastructure projects needed to service the housing that the province wants to build, or we are increasing property taxes and user rates over the long term. It's not necessarily immediate, but over the next 5, 10, and 20 years there will be a significant impact. The province has an ambitious housing target over the next 10 years - we need to accommodate more housing than we had planned for, and yet our primary funding source in the form of development charges is being restricted.

This is likely the hardest budget I've ever done.

Craig Dyer, Waterloo

Heather Taylor (Toronto): For the City, as it relates to the provincial support during the pandemic, we're still not made whole for 2022, but there was an announcement yesterday that a one third portion of our COVID shortfall would be granted. We have made a very compelling case to the federal government and the provincial governments around the need to address transit operations. If you think about where there are always announcements, it's around transit growth, which one will argue we absolutely need, as we see populations coming into the city. But in actual fact, operating cost associated

with that expansion of transit has to be paid somehow, and the transit fare box doesn't cover the operations.

The city subsidizes the TTC on top of the fare box by a billion dollars a year, so as transit expands, that subsidy will have to expand, and we're turning to other orders of government to say that with this new hybrid reality, we do need continued support.

In many instances, we offer programs that are subsidized if you meet certain thresholds. And I would suspect that history shows during recessions, more families and individuals meet the thresholds that qualify them for those programs.

Heather Taylor, Toronto

Whether someone wants to label that as COVID support or do we look at a regional model to deal with transit? Do we look at a different model with regards to services that benefit more than just the citizens of Toronto? So I will say that I'm guarded about being optimistic around funding, but with the size and the demands on the shelter systems that are created by potential recessionary environments, by the COVID scenario, and by immigration, I just think they have to pay attention to continued support. So I think we all agree to continued support and there's lots of great data that shows why we need it. We just hope that they understand the importance of continuing the support.

And then we get into Bill 23, which I think we will all admit with a bit of a curve ball, with no heads up, it came out of nowhere.

We were all in the midst of our budgets, and as people are familiar with municipal budgeting, we do 10-year capital plans. To have the amount of revenues that we're generating to fund our capital substantially impacted without warning, we're still trying to figure out how that's going to unfold, but the preliminary estimates for the city are C\$230 million a year, and C\$2.3 billion over 10 years. Where there is concern is that in order to support growth, which is the demands of the province, you in actual fact have to invest up front. If we're limited in those investments, there are unintentional consequences to the legislation which will actually slow things down. Where we come up with the money for that upfront investment, is guided by how much we can finance, how much we can afford given high interest rates? How do we repay that?

I think the province believes it's the approval process that gets the units. You have to also think about the upfront investments required to support the development such as roads, infrastructure, water, and main sewers. I keep saying have they thought about

schools, hospitals, doctors, etc., all the provincial services and responsibilities that support residents in Ontario that are going to be needed for that increased population. We have tried our best to educate. I think everybody here participated in compiling information that was shared with a standing committee on the Bill 23 consultations. I don't believe that there is a sound understanding of the impacts of Bill 23 on municipal finance and on the ability to expedite housing. In actual fact, it's counterintuitive.

Without the money, there's no ability to invest in the infrastructure that's needed to support communities, new housing units, or increased density for that matter. There is a substantial concern that's been flagged by the mayor to the premier. There are discussions about what the government do to fill the gap that they just created. Understanding how it truly impacts the 10-year capital plan, I don't think we have enough time. The other piece of legislation that I get to be the beneficiary of is Bill 3. There's two municipalities in Ontario that are impacted by strong mayor powers, which dictate our budgets need to be tabled by February 1st. So we don't have time to actually truly flush out in great detail the impacts of Bill 23 on our capital plan and still be able to deliver a budget by February 1st, so we are putting in high level assumptions. The city had just completed a background study, which informs new DC rates going forward. Thankfully, we have current information that will help expedite the impacts or understanding the impacts, but that's still to be flushed out. This entire conversation time slot could be taken up by our opinions on Bill 23, so I would cap it at that and allow my colleagues to say the rest.

Laura Mirabella (York): One area the Province has committed to continue to support regions in is their incremental public health costs. The costs of having those mass vaccination clinics and encouraging vaccinations, but my colleagues are correct, they have backed away from additional transit funding. That is unfortunate because they are also asking us to push more people onto transit to reduce our parking minimums. We're really in this transition phase where if ridership doesn't recover, we don't have the operating cost to even fund our current services. Our councils are very reluctant to expand services when we can't achieve the cost recovery ratios that they have mandated for us.

Talking about Bill 23, I was saying earlier the province has made some choices around our fiscal arrangements for how we fund infrastructure, but I want to put a few things in context. Their narrative is around municipal fees and charges impacting housing affordability. Nobody argues that we have a supply problem that more supply would help moderate. At the end of the day, we're really returning to 1980s ideas and supply side economics doesn't always work. More supply isn't going to necessarily increase affordability. It might just increase profits. And I think that's borne out by the fact that while demand continues to exist, as Heather was saying earlier, developers are actually putting a pause on projects because they don't like the margins they're getting with the increased interest rates.

The reality is the demand is out there, if they priced their product accordingly, they could sell it all and build more, and they're choosing not to. Development charges make up about 7% of the cost of a home in York Region. Even if they were completely eliminated for all homes and all of the savings were passed on, I don't think 93% of current prices is really going to expand affordability as much as we need in the GTA. That being said, the province gets to decide that we can't collect as much as we have in the past. It's about 10 to 15% reduction in development charges for York Region, and that will impact our capital plan in some way.

The capital plan needs to be balanced. Both on the operating side and the capital side

Laura Mirabella, York

The capital plan needs to be balanced. Both on the operating side and the capital side, we have to plan for balance. We need to have strong balance sheets. We're not a senior level of government with an unlimited taxing authority, so we need to have these strong balance sheets, which means we need to have reserves. They're talking about auditing our reserve levels. The reserves that municipalities have are to ensure that we've got appropriate liquidity on our balance sheets, they're to ensure that we can keep our current assets in a state of good repair, and that our debt levels don't go above affordable levels. So for a given level of capital expenditure, for our development charges decrease, we're actually having to increase property taxes or draw down our reserves and weaken our balance sheets. And I think when most municipal councils are faced with that, it's going to be a very difficult choice.

The risk is we actually reduce our capital expenditures, which will facilitate less growth related housing. There's likely some unintended consequences here which haven't been fully thought out. 10 to 15% for us is about C\$500 million, so about half a billion dollars over the next 10 years on a capital plan of C\$9.5 billion. That is significant because it's really the share that is funded from development charges, which is about 40% or so. We would actually have to reduce the capital plan by over a billion dollars, C\$1.2 billion, with all things being equal in order to stay in equilibrium with the loss of those development charges. We won't have all the answers for this year's budget process because our budget is essentially fully baked and was even by the time Bill 23 was introduced. We will have to take that away, and flag some of these high level assumptions to our council and we will have to come back later in the year, probably at our mid-year report, when we understand a bit more, to make some recommendations about how we change either the cadence of our capital plan or make recommendations about increased tax levy funding for our capital plan.

Heather Taylor (Toronto): I want to just expand on something that Laura started to touch on, and I should have mentioned. I think

there's a misnomer that municipalities and regions have these large reserves that have been collected from developers and we're just sitting on them and they are not being spent. I think what's happened is there's a misunderstanding that when development charges are received, that money is restricted, contractually obligated to be spent and invested to support the development that has already been approved. The feeling is we can exhaust those reserves before we need to actually start collecting, and I think that in itself is a misunderstanding. Those reserves are really deferred revenues. There are the reserves that Laura spoke to that we intentionally put money away for a crisis like COVID, but I don't think municipalities have robust reserves on top of the deferred revenues that we've collected. They all get captured and described the same way.

I think the development community really did portray these deferred revenue balances that we're sitting on as cushions of unspent money.

MUNICIPAL BORROWING

Mansoor Khan (RBC): One of the key structural features worth highlighting regarding Canadian municipalities for the audience is that they only borrow for capital projects and not for operating purposes. That has been a strong selling point for municipal issuers when meeting domestic and international investors. Maybe we can chat a little bit regarding the borrowing programs for all the issuers present in our panel today. Starting with you Matt, from MFABC's perspective, your borrowing program went from ~C\$2 billion in 2021 to ~C\$1.3 billion in 2022. Can you provide a brief overview of your borrowing program, how that has changed in the last year, and what do you expect next year?

Matthew O'Rae (MFABC): 2023 versus 2022, we'll certainly see some higher overall borrowing requirements predominantly due to refinancing. Right now, we've got the 2023 borrowing program pegged between roughly C\$1.6 to C\$2 billion. It's really going to depend on some of the things that we've talked about with respect to both growth and maintenance capital expenditure requirements along with affordability of funding for new loans. We're going to see a slight increase as mentioned over last year, on the back of refinancing. For new loan growth, we're expecting it to be flat, maybe slightly less. We're waiting to see how capital inflation and debt service affordability work its way through our members during their budget planning processes.

With regard to term, we have ventured out in the 20-year space and we'd certainly love to do more as our underlying loan book and project funding requirements align. Next year, we'll keep an eye on the 20-year, but investors can probably expect two 10-year issuances to fund new loan requirements, although they will likely be slightly later than we typically come to market (June/November), as we balance market timing to meet refinancing requirements. We will continue to try and get issue sizes up to C\$500 million benchmark

I personally have briefed some of those large organization to try and shed some insight. The other thing I do want to highlight is that in conversations with the province, they also believe that as we expand our tax base and we build these new units, we will be generating substantially more revenue that will actually help the budgets. The tax base will increase, however, so will the demands for city services. If we think now we've got pressures based on the current population, those pressures will only increase with growth and obviously inflation. So there's this misnomer with property tax revenue, in that it is meant for the operating budget, not for the capital budget. I just wanted to highlight there's those two aspects of disagreements between the municipalities and the province as to the purpose of those deferred revenue reserves and the future income that will be generated.

Mansoor Khan (RBC): Thanks a lot for sharing your thoughts and I am sure there is more to come on this next year.

levels to ensure adequate liquidity. We also have a September and December bond coming due. Investors can expect refinancing requirements for each in and around C\$400 million for each of those maturities – expect 5-year maturities for those as usual for refinancings. We'll continue to look at what we can reopen versus started a new line wherever manageable.

We have ventured out in the 20-year space and we'd certainly love to do more as our underlying loan book and project funding requirements align.

Matthew O'Rae, MFABC

We'll have a small refinancing amount in April that we'll likely do via private placement and with some commercial paper (roughly C\$100 million each). That's the issuance composition and size that we're looking to do in 2023. We're continually updating our investor relations slide deck as we get a bit more color from some of our larger members that are currently in their budget planning process.

Mansoor Khan (RBC): Matt, can you also elaborate a bit more on why MFABC only issues 5 and 10-year bonds?

Matthew O'Rae (MFABC): It is basically a clean way for us to create amortizing loans from 5 out to 30 years. Historically, the bulk of the loans have been amortized for 15-years or longer in each loan package being funded – the Member chooses their preferred amortization period. We typically fund each loan package out of the gate with

a 10-year debenture and then subsequently refinance with 5-year debentures until maturity of the last 30-year loans. As the 10-year debt matures (5 and 10 year loans have amortized), we only refinance debt at a level that is in line with the loan book continuing (15, 20, 25 and 30 year loans). We are asset-liability matching as the loan packages amortizes down to zero over 30-years. As part of our debt management strategy, we have a desire to reduce our refinancing risk, push the term of our debt out and build a longer dated benchmark curve. From time to time the loan book only has 20-year loans or longer in it and we'll look to issue a 20-year debenture in those cases. Unfortunately, this past year, we probably could have made a 20-year work with the loan package that required financing, but the market wasn't quite conducive in that part of the curve, so we backed away and ended up doing another 10-year debenture.

Mansoor Khan (RBC): Turning over to you Heather, City of Toronto borrowed around C\$1 billion in 2021 and increased their borrowing to C\$1.2 billion in 2022, can you please provide an overview of your borrowing program?

Heather Taylor (Toronto): In the past we've actually gone into the market for a billion dollars a year. We have just completed an issuance this week that took us up to C\$1.2 billion. That is the amount that we carry through. We do have authority to go up to C\$2 billion in any one year, but given interest rates, we will be managing the ability to stay within our 15% debt service ratio threshold that we've set.

The reason we pick those terms is we match the asset that is being amortized. [...] So the 10, 20, and 30-year gives us flexibility of managing a portfolio of assets that have different useful life terms.

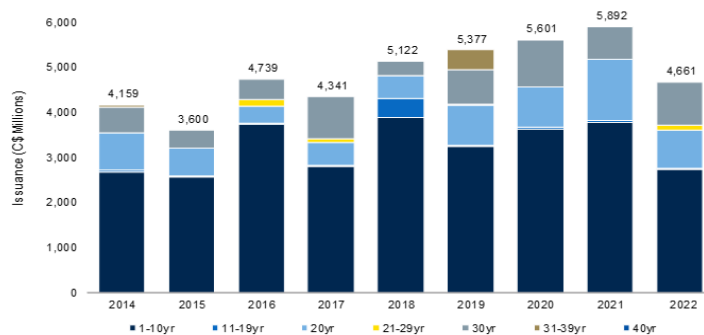
Heather Taylor, Toronto

I will say that a couple years ago we did launch our sustainability financing framework, which involves both the green bond and a social bond. And I think throughout 2022, we all know it was a very volatile time, it has been since COVID surfaced. I do think that the attractiveness of the green bond and the social bond is what allowed us to have successful placements. We are committed to continuing that into 2023 and onwards. The new base for the City of Toronto will start at C\$1.2 billion.

Mansoor Khan (RBC): I will come back to you and talk more on ESG as there is a lot to talk about there but before that, just to highlight to the audience here, Toronto continues to target 10, 20, and 30-year terms in the domestic market, any reasons behind that Heather?

Heather Taylor (Toronto): The reason we pick those terms is we match the asset that is being amortized. Some assets don't have 30-year lives,

ANNUAL C\$ MUNICIPAL ISSUANCE



Source: RBC Capital Markets

and so we cannot amortize debt over an asset that's already at its end of useful life. So the 10, 20, and 30-year gives us flexibility of managing a portfolio of assets that have different useful life terms.

Mansoor Khan (RBC): Craig, Waterloo has been a consistent issuer in a serial format. Could you provide some context around why Waterloo target serial bonds compared to bullets? Maybe also share how much you borrow annually and your plans for next year?

Craig Dyer (Waterloo): The Region's debt issuance is much smaller than Toronto and MFABC. Traditionally we've been in the market twice a year, typically in the spring and fall. We issue debt to finance our own capital works as well as for the seven lower-tier municipalities within the Region. We assemble all the financing needs and put together a financing program that works for the multiple beneficiaries of the issue. This past year we issued just over C\$80 million through two issues. I would expect next year to likely be similar, with our borrowing needs probably somewhere in the range of C\$80 to C\$100 million. One of the wild cards is the extent to which municipal capital programs will be adjusted due to capital cost escalation and the cost of borrowing as we already discussed.

Our preference for serial issues is really just a matter of quantum. If we are looking for C\$40 - C\$50 million in financing, we can use the serial structure to take advantage of the lower rates in the earlier years and achieve an overall lower cost of borrowing. That's typically why we've gone that route, with a few notable exceptions. When we financed our Stage 1 LRT project a number of years ago, we used two C\$50 million, 30-year bullet issues. So our debt structure will vary depending on the project. Again I think we will be looking to issue C\$80 to C\$100 million in the 10 to 20 year range in 2023.

Mansoor Khan (RBC): Laura, York was absent from the market this year. Could you please provide some context around the reason for the absence and how you run your borrowing program under normal circumstances?

Laura Mirabella (York): We have had years in the past where we haven't gone to market and for this year, one of the main reasons is

that we did a bit of pre-borrowing over the last couple of years. We had the flexibility to be able to take advantage of some of those ultra-low interest rates. We also have the advantage of that 10-year capital plan, so we know exactly what capital projects are happening. We have some longer term contracts, and so we were able to do a bit of pre-borrowing over the last couple of years, which didn't require us to go to the market in 2022. We generally plan to go out twice a year, also in the fall and spring, and we do a combination of 10s, 20s, and 30s, according to the lifespan of the assets that we are financing against.

We generally plan to go out twice a year, also in the fall and spring, and we do a combination of 10s, 20s, and 30s, according to the lifespan of the assets that we are financing against.

Laura Mrabella, York

We do plan to and intend to go out to the market in 2023. At this point, we are looking somewhere south of C\$200 million, probably in the C\$160 to C\$180 million range at this point. That's all subject to change as we start to dig into the analysis around Bill 23 and what may need to change in terms of the cadence of our capital plan, which may have an impact on our financing strategy. At this point, we are expecting to go out to the market, but I just don't know whether that C\$160 to C\$180 million will hold.

Craig Dyer (Waterloo): Just on this topic, if I may ask a question of Rachel about long-term interest rates. What is your prognosis on long term rates at this point as we think about potentially going to

the market twice in 2023? Do you think rates will be lower by the fall? I'm wondering if you have any perspective on that at this early stage.

We can use the serial structure to take advantage of the lower rates in the earlier years and achieve an overall lower cost of borrowing. That's typically why we've gone that route.

Craig Dyer, Waterloo

Rachel Battaglia (RBC Economics): I'll leave it to my colleagues in Capital Markets to give advice on when you should issue debt. But I can certainly tell you what we're expecting for longer-term interest rates next year. 10- and 30-year yields have already come down quite a bit over the past couple of months—they're nearly a percentage point below their October highs. That's reflective of the expectation that the economy will continue to slow, inflation will continue to moderate, and central banks will eventually move monetary policy to a less restrictive zone. Given those are trends we're anticipating over the next year or so, we think the recent decline in yields is justified.

Shorter-term yields are likely to come down next year as the Bank of Canada hits pause on its tightening cycle and the market begins to focus more on eventual rate cuts. But ultimately we don't think the Bank of Canada will be cutting rates as much or leaving them as low for long periods of time as they have in recent cycles - and that will help keep longer-term yields anchored around current levels. RBC's forecast assumes yields will drift a bit lower next year but not substantially, although there's always the risk of volatility around these forecasts.

ESG AND SUSTAINABLE FINANCE INITIATIVES

Mansoor Khan (RBC): It's almost impossible to have any discussion nowadays without talking about ESG. I had a couple of questions starting off with Heather. Two years ago, the City of Toronto became the first public sector issuer, at least in Canada, who published an ESG performance report. Since then, we've seen the province of British Columbia produce one as well. Kudos to you for setting the standard and encouraging other issuers to do the same. From your perspective, two years down the line, how has this report evolved? And secondly, has it so far achieved the objective that you set out initially when you published the report?

Heather Taylor (Toronto): When you ask about if the report has achieved its objective, someone else has done one now – the province of BC has done one, so I'd say yes right off the bat. For the size of the city, the objective was about bringing together all the great work that the city was doing and was committing to. As you

can appreciate with the size of the city, very often work gets done in silos and there's no real integrative thinking or reporting. It was an opportunity to actually bring all those commitments and all the work that was being done into one area for stakeholders to read about, for stakeholders to monitor, and to hold us accountable. So I would say yes – was it successful and was it what I hoped. It was a start.

I think what's really important now as we look towards your question about the evolution is you're aware that I am involved in the Public Sector Accounting ("PSA"), and so I'm close to the standards that are coming out through the international body, the International Sustainability Standards Board ("ISSB"). There are standards that are coming, and it is about being prepared, not only from a financial statement perspective, but from that additional disclosure on what is important to investors. But I think, what I'm going to be excited about in our next report is that with all the concern about

greenwashing in the market and with our sustainability framework, what I've done is I have been working with the International Organization for Standardization ("ISO") to get us certified under two standards, the Sustainability Standards and the Smart City Standards, which all fall under the ESG umbrella, but I'm also working with them on an ESG Standards.

By showing evolution, improvements and additional data reporting each year, it's also forcing the city to get better and mature our data collection, data requirements, as well as set better KPIs.

Heather Taylor, Toronto

By showing evolution, improvements and additional data reporting each year, it's also forcing the city to get better and mature our data collection, data requirements, as well as set better KPIs. I think it's been a huge success. It holds us more accountable, which is the piece that I'm quite keen about. I was super excited to see the province of BC do so. My colleagues here will attest to the fact that I have talked to them about ESG reporting. I've always said that hopefully I've done it in a way that makes it truly easy to copy and easy to replicate so that more of us are doing it and, and more stakeholders are interested in seeing us do it.

Mansoor Khan (RBC): Are there any specific ESG targets for the City of Toronto that you would particularly like to highlight for the audience?

Heather Taylor (Toronto): During 2022, we actually came up with our climate plan and we have clearly established goals and targets that we want to set, and we've accelerated our net zero target from 2050 to 2040. So the plan itself, the climate change plan, in actual fact outlined what we wanted to do under the "E" of ESG. I think it'll be really important to watch as we see the Ukrainian crisis unfold, as we look at immigration, to really understand what the "S" is going to be. We can talk about it at a very high level from our past experiences, but I think it is truly understanding what's coming at us from the "S" perspective, and then from the "G" is getting ready for the disclosure.

We've already got Task Force on Climate-Related Financial Disclosures ("TCFD") that we are already doing in our financial statements. It is about the governance, it is about the oversight and the accountability. I think most people when they hear of ESG, they really focus on the "E" and they kind of forget about the "S" and "G". TCFD could easily be in my colleagues' financial statements, even if they don't want to do an ESG report. So I think there's multiple opportunities for organizations to start looking at and tackling.

Mansoor Khan (RBC): The inevitable question for Laura and Craig is when are we seeing ESG reports from Region of York and Waterloo?

Laura Mirabella (York): I'm thrilled to get the question. I want to start by thanking Heather because her leadership in this area helped prime the pump. I'll start by saying something you've probably already heard from my Director of Treasury at Hankins – everything that municipalities do has an environmental sustainability component. We are in the business of making sure that our communities have the infrastructure that they need and that it stays in a state of good repair despite all of our climate change risks. So a lot of what we do is already around that, but as Heather said, it's about how do we communicate that? How do we communicate it to our councils? How do we make it concrete for them that they're making those decisions? So you will see for the first time this year in our budget book, we are revamping our planning and budgeting chapter, and we are talking about the creation of a formalized ESG framework for York Region.

One of the things that happened in the spring was our Planning Department and Environmental Services Department came together and brought council a formalized climate change action plan. The framework that the Finance Department is putting together is going to be about how we start to communicate and measure performance in all of those areas. That'll be under development over the course of this year. We're hoping to have our first ESG performance reporting in 2024, but it really will be an iterative process. We're starting to talk about it in the planning and budgeting chapter (of the Budget Book), which will be the starting point. Then, developing a framework in line with some of those international frameworks that already exist, looking at best practices around the world, and then subsequently getting to some reporting in 2024.

For the first time this year in our budget book, we are revamping our planning and budgeting chapter, and we are talking about the creation of a formalized ESG framework for York Region.

Laura Mirabella, York

All that said, that doesn't mean that we're going to be rushing to issue an ESG-branded bond anytime soon. That's because our council is pretty conscious that we don't want to be out there being accused of the greenwashing. Without having the framework in place, without having really clearly defined ways in which we measure our performance against some of those targets, taking on the increased reporting requirements of an ESG-branded bond, I think is not our wisest choice. Stay tuned possibly in 2024, in terms of our engagement with the market in that way. The starting point will be getting the foundation built, and we're working on that over the next year.

Craig Dyer (Waterloo): I would say we right at the infancy stage and just starting to think about it. We have adopted climate change

targets like many municipalities have, declared a climate emergency, and have put together a climate action group within our organization to lead the exercise of achieving those targets over the next 10, 20, and 30 years. That being said, we haven't as of yet spent a significant amount of time looking at an ESG framework. It's something that we will consider in 2023 or 2024, depending on a variety of issues and priorities. When I think about the debt we have issued in the last few years, it has been largely focused on water, wastewater, public transit and new buildings and facilities. Going forward, we will be financing affordable housing projects as we start to implement our housing master plan. So definitely more to come on this front.

We haven't as of yet spent a significant amount of time looking at an ESG framework. It's something that we will consider in 2023 or 2024.

Craig Dyer, Waterloo

Mansoor Khan (RBC): Turning over to you Matt, MFABC discloses their use of proceeds for all its bond issues. Could you provide some context around what MFABC is currently doing on the ESG front? I believe you have been looking at a few options on the disclosure side as well.

Matthew O'Rae (MFABC): As an infrastructure bank, we do not follow PSAB but IFRS accounting so we're continuously monitoring IFRS standards and the prototypes that they have out there for ESG disclosures and financial reporting purposes. We're watching this closely as it evolves since it is ever-changing. We want to make sure that those future disclosures for financial statement purposes are in sync with our sustainable framework and our future impact reporting that we do.

With respect to our framework, we lay out every single dollar that we borrow in advance for investors so that they can see how we're tying it to the UN SDGs and green and social principles at the project level. This project level disclosure is a new addition that we've added over the last few years. With specific bylaws in place, municipalities are only allowed to spend that money on the project purpose identified. So in our offering circular, we lay that out and then investors can look at it, see exactly how we've mapped it, what projects are being funded and whether it meets their internal requirements if applicable. From here we are developing standard KPIs across the various project categories with local governments in the province. All our members will eventually be required to collect and report those to MFA so that we can aggregate that data and pass it along to investors to continue enhancing our disclosures.

Mansoor Khan (RBC): A big challenge for MFABC has been to obtain standardized KPIs from the borrowing municipalities. How is MFABC tackling this challenge?

Matthew O'Rae (MFABC): I think we're getting there. Our large members, and for certain categories of borrowing like water and sewer projects, for example, the KPI's are already being monitored and collected as they create their business cases and build their projects as many have large teams devoted to sustainability. I think there's a lot of work we can leverage there. We're in the process of hiring a Director of ESG who should be joining us in the new year, and that will allow us to really push forward with even the smallest of local governments who are very resource constrained. The real challenge for some of the smaller local governments is that key figures are not only the head of finance, they're running procurement, and they may also be the engineering department and hence are spread very thin. We're going to identify the KPI data we need and then help them collect that data in an efficient fashion, perhaps creating access to some funding and consulting capacity for KPIs. We're targeting 2024 or 2025 to have some of this in place.

Mansoor Khan (RBC): MFABC also manages money for the municipalities. Can you provide some information on how MFABC manages that process and any key observations there?

Matthew O'Rae (MFABC): Not only are we providing centralized borrowing services, we're also providing centralized pooled investment fund options to help protect and invest reserves at the lowest cost in diversified and well-managed products. We've got a series of pooled investment funds (managed by PH&N) and a series of pooled high interest savings accounts (managed by CIBC, National Bank and Scotia bank) that our members can utilize and match their investment horizon accordingly with the timing of when the reserves are needed.

We lay out every single dollar that we borrow in advance for investors so that they can see how we're tying it to the UN SDGs and green and social principles at the project level.

Matthew O'Rae, MFABC

All of our pooled funds (away from the HISAS) are managed using responsible investment practices and incorporating ESG into the investment process, and some of our members have asked us to focus on low carbon and fossil-fuel-free options to meet their citizen's and council's sustainable investment beliefs. We have created several of these low carbon or fossil fuel free options with our external asset manager over the last couple of years.

Members have also asked to create longer-term investment options for money earmarked for longer dated infrastructure asset to be built in the future. This year we launched a new investment fund, the Diversified Multi-Asset Class (DMAC) fund to meet those longer-term investment needs. It is a low carbon footprint fund that is diversified

geographically and by asset class – holding global bonds, global equities and alternatives – and that targets inflation plus 3.5% over 10 years or longer. We are now working on a fossil fuel free version of that same fund to meet the needs of some local governments in BC that have a strict FFF policy requirements for all their investments.

Mansoor Khan (RBC): Heather, City of Toronto has had the most remarkable record as it relates to issuing green and social bonds every year since they set up the program. Toronto was once again able to issue both Green and Social bonds this year. What were your main takeaways from these labelled bond issues this year?

Heather Taylor (Toronto): I am really proud of the fact that we have both green and social under a sustainability framework. I want just to take the opportunity to point out that when we did our social bond, our first social bond was done in the spring of 2020, so right in the throes of COVID. It was really interesting to see the market reaction because at a time where the markets were quite volatile, there was substantial demand. That's what we've seen throughout COVID and we've done annual bonds since then. We did a placement this week, and we did it in a day and the majority of investors were ESG investors. There is a demand, as investors want to place their money in bonds that have outcomes other than just an interest rate of return.





I'm not sure if we can classify what we're seeing as a greenium, but I will say that in the volatile market that we've experienced and

having the success of being more than two times oversold with room to grow, that was because of it being a labeled bond. I can say with confidence that would not have happened with a conventional bond. The city's committed to doing this on an annual basis. It's 45% of our total issuance right now. I'd like to see that go up, but we do have a framework that we have to follow. Not all of our assets are going to be able to fall under that framework. We still have roads to build, which may not necessarily fall under that framework. We're very particular, and we fund our projects after the projects are completed, so we have the ability to have projects qualify for that third party attestation. The commitment is there to try and increase the percentage of our total annual borrowing, but it'll take time to get it to become a more substantial piece. I am pleased that within the three years of us doing it, we've reached 45%.

Mansoor Khan (RBC): That certainly is a remarkable record. We were very fortunate to lead the Green Bond transaction for the City which had books in excess of C\$650 million allowing us to upsize the transaction from C\$200 to C\$300 million. ESG investors accounted for over 90% of the book highlighting the strong demand for these labelled bonds. So congrats on a very successful outing once again!

I would like to thank all our panelists today for taking out the time from their busy schedules to talk about the most pressing topics related to the Canadian municipal sector. We are delighted to have hosted another round of interesting discussions this year and hope to see you all again next year. Thanks once again!

SELECT CANADIAN MUNICIPAL ISSUERS

	 MONTREAL	 MFABC	 TORONTO	 TRANSLINK
RATINGS	A(H) / Aa2 / AA	Aaa / AAA	Aa1 / AA	Aa2 / AA
TYPICAL ANNUAL BORROWING REQ. (C\$MM)	6,50-1,300	1,200-2,000	950-1200	200-650
2022 DEBENTURE FUNDING	C\$650 million	C\$1.2 billion	C\$1.325 billion	C\$300 million
TYPICAL # ANNUAL ISSUES	4-5	3-4	4-5	1-2
TYPICAL MATURITIES	10-year 20-year	5-year 10-year	10-year 20-year 30-year	5-year 10-year 30-year
PUBLIC DEBT OUTSTANDING (C\$MM)	10,994	9,667	9,666	3,280
CREDIT STRENGTHS	<ul style="list-style-type: none"> • Exceptional internal liquidity support and strong access to external liquidity for refinancing needs despite high funding owing to capital spending on its infrastructure deficiency • Strong budgetary performance with a proven track record of strong operating surpluses • Modest debt load and a relatively stable interest burden support the existing maturity profile 	<ul style="list-style-type: none"> • Strong liquidity with current debt reserve fund in excess of \$100 million • MFABC has the ability to levy a tax on all taxable land without provincial level government approval • Municipal long term debt of MFABC constitutes joint liabilities of the participating municipalities • Only 25% of sustainable revenues eligible to service debt costs 	<ul style="list-style-type: none"> • Strong liquidity position with large reserves that allow for flexibility in accessing capital markets • Broad and diversified economy which serves as a major global financial centre • Relatively conservative policy of limiting annual debt service charges to 15% of property tax levy and to 20% of own source revenue • 6th largest government in Canada and 4th largest city in North America 	<ul style="list-style-type: none"> • Strategic importance as the main regional transportation provider in British Columbia • Access to diversified revenue sources including tax revenues and transit income • Strong governance and institutional characteristics
REVENUE SOURCE (2021)	Taxes (63%), Services (22%), Transfers (7%), Quota shares from reconstituted municipalities (8%) (1)	Client Interest Payments (58%), Investment Income (36%), Financial Service Fees and Premium Amortizations (6%) (2)	Taxes (Prop., Land Transfer) (37%), Fed/Provincial Transfers (27%), Transit (5%), User Fees (5%) (3)	Taxes (54%), Transit (21%), Fed/Provincial Transfers (12%), Investment Income (3%) (4)
OPERATING BUDGET	C\$6.76 billion (1)	~C\$399 million (2)	C\$14.99 billion (3)	~C\$2.2 billion (4)
CAPITAL EXPENDITURES	C\$22 billion 10-year capital program (1)	n/a	C\$46.6 billion 10-year capital budget and plan (3)	C\$587.4 million (4)
EST. POPULATION*	1.76 million	n/a	2.8 million	n/a
OTHER CREDIT CONSIDERATIONS	Largest metropolitan area in Quebec and second largest in Canada	Created by provincial legislation to borrow on behalf of 28 Regional Districts in British Columbia	In 2009, Ontario passed the City of Toronto Act, 2006 (COTA) expanding the City's ability to levy taxes and increase revenues	The only issuing non-corporate transportation authority in Canada

(1) Montreal Budget 2023 (2) MFABC Financial Statement 2022 (page 12) (3) Toronto Operating Budget Report 2022 (page 64, 11) (5) City of Vancouver Draft Budget 2023 (page A-1, B-30, B-74) (6) Waterloo 2022 Final Budget (Page 5); 2023 Proposed Operating Budget (Page 5); 2023 Proposed Capital Budget and 2024-2032 Capital Forecast (Page 10) (7) York 2021 Community Report (Page 51); 2022 Budget (Page 6) *Statistics Canada Census Profile 2021 (7) York 2021 Community Report (Page 51); 2022 Budget (Page 6)

*Statistics Canada Census Profile 2021

Select Canadian Municipal Issuers Continued

	 VANCOUVER	 WATERLOO	 YORK
RATINGS	Aaa / AAA	Aaa	Aaa / AAA
TYPICAL ANNUAL BORROWING REQ. (C\$MM)	85-120	80-90	300-400
2022 DEBENTURE FUNDING	C\$120 million	C\$82 million	n/a
TYPICAL # ANNUAL ISSUES	1-2	2	1-2
TYPICAL MATURITIES	10-year	10-year 20-year	10-year
PUBLIC DEBT OUTSTANDING (C\$MM)	1,105	789	3,431
CREDIT STRENGTHS	<ul style="list-style-type: none"> • Exceptional liquidity coupled with high debt affordability • Strong and diverse economy underpins long-term strength • Stable revenue sources and operational flexibility cushion operating pressures • Strong governance and fiscal management, and supportive institutional framework 	<ul style="list-style-type: none"> • Strong local economy with diverse revenue sources • Steady revenue, COVID related government support and prudent fiscal planning offsets inflation concerns • Excellent management with institutional framework 	<ul style="list-style-type: none"> • Exceptional liquidity & wealth paired with growing cash and reserves • Diversified economy supporting stable tax revenue • Matured institutional governance • Strategic cost control and steady revenue source alongside government funding lift off fiscal pressures
REVENUE SOURCE (2021)	Property Taxes (58%), Utility Fees (20%), Licence & Development Fees (5%), Parking (4%), Grants (4%), Fees (4%) (5)	Taxes (34.7%), Government Transfers (27.5%), User Fees (13.6%) (6)	Taxes (41%), Government Transfers (23%), User Fees & Services (17%), Development Fees (12%) (7)
OPERATING BUDGET	C\$1.9 billion (5)	~92.5 million (6)	C\$2.7 billion (7)
CAPITAL EXPENDITURES	C\$730 million (5)	C\$112.7 million (6)	C\$9.5 billion 10-year capital plan, C\$918 million for 2023 (7)
EST. POPULATION*	2.6 million	0.1 million	1.2 million
OTHER CREDIT CONSIDERATIONS	Strong local economy with access to a growing and broad tax base which has consistently translated into strong operating results	Waterloo has a high likelihood of receiving extraordinary support from the Province of Ontario in event of possible capital disruption	York has a high likelihood of receiving extraordinary support from the Province of Ontario in event of possible capital disruption

(1) Montreal Budget 2023 (2) MFABC Financial Statement 2022 (page 12) (3) Toronto Operating Budget Report 2022 (page 64, 11) (5) City of Vancouver Draft Budget 2023 (page A-1, B-30, B-74) (6) Waterloo 2022 Final Budget (Page 5) ; 2023 Proposed Operating Budget (Page 5); 2023 Proposed Capital Budget and 2024-2032 Capital Forecast (Page 10) (7) York 2021 Community Report (Page 51); 2022 Budget (Page 6) *Statistics Canada Census Profile 2021 (7) York 2021 Community Report (Page 51); 2022 Budget (Page 6)

*Statistics Canada Census Profile 2021

SELECT RBC-LED TRANSACTIONS IN 2022

Select Transactions
for Canadian
Government Issuers
& Asset Managers

 C\$500,000,000 3.245% Ukraine Sovereignty Bond due 2027 AAA/Aaa/AAA Joint Bookrunner November 2022	 C\$1,250,000,000 3.60% Senior Notes due 2028 AA(L)/Aa3/A+ Lead November 2022	 C\$4,750,000,000 Dual Tranche CORRA FRN due 2028 & 3.55% Senior Notes due 2032 AAA/Aaa/AAA Lead November 2022	 C\$360,000,000 3.30% Senior Notes due 2032 AAA/Aaa/AAA Joint Bookrunner September 2022
 A\$1,000,000,000 4.45% Senior Notes due 2027 AAA//Aaa/AAA Joint Bookrunner August 2022	 US\$1,000,000,000 3.25% Senior Notes due 2027 AA(L)/Aa1/AA Joint Bookrunner June 2021	 C\$500,000,000 4.25% Senior Notes due 2053 AA(H)/Aaa/AA+ Lead May 2022	 US\$2,750,000,000 3.00% Senior Notes due 2027 AAA/Aaa/AAA Joint Bookrunner May 2022
 US\$2,250,000,000 3.10% Senior Notes due 2027 AA(L)/Aa3/A+ Joint Bookrunner May 2022	 GBP\$750,000,000 2.25% Senior Notes due 2026 AA(L)/Aa2/AA- Joint Bookrunner April 2022	 US\$3,500,000,000 2.875% Senior Notes due 2025 AAA/Aaa/AAA Joint Bookrunner April 2022	 £1,500,000,000 3.00% Senior Notes due 2027 AAA/Aa1/AA+ Joint Bookrunner April 2022

SELECT RBC-LED TRANSACTIONS IN 2022

Green Bonds and Sustainable Finance

 C\$300,000,000 4.40% Green Bond due 2042 AA/Aa1/AA Joint Bookrunner November 2022	 C\$1,250,000,000 3.80% Inaugural CAD Green Bond due 2027 AAA/Aaa/AAA Joint Bookrunner November 2022	 C\$1,000,000,000 4.450% Inaugural Green Bond due 2032 AAA/Aa1/AA+ Joint Bookrunner November 2022	 C\$1,000,000,000 1.55% Green Bond Due 2029 AA(L)/Aa3/A+ Joint Bookrunner October 2022
 C\$1,000,000,000 3.0% Green Bond Due 2028 AAA//Aaa/AAA Joint Bookrunner August 2022	 C\$1,000,000,000 3.65% Green Bond Due 2032 AA(L)/Aa2/AA- Joint Bookrunner May 2022	 C\$5,000,000,000 2.25% Inaugural Green Bond due 2029 AAA/Aaa/AAA- Joint Bookrunner March 2022	 C\$1,000,000,000 2.600% Inaugural Green Bond due 2032 AAA/Aaa/AAA Joint Bookrunner February 2022

Maple Offerings

 C\$500,000,000 3.80% Green Bond due 2027 - /Aaa/AAA Joint Bookrunner November 2022	 C\$700 million 3.80% Gender Bond due 2025 -/Aaa/AAA/AAA Joint Bookrunner August 2022	 C\$500,000,000 1.75% Senior Notes due 2025 AAA/Aaa/AAA Joint Bookrunner February 2022	 C\$300,000,000 1.8% Sustainable Bond due 2025 - /Aaa/AAA Joint Bookrunner February 2022
 THE WORLD BANK <small>IBRD • IDA WORLD BANK GROUP</small> C\$1,500,000,000 1.0% Sustainable Bond due 2027 AAA/Aaa/AAA Joint Bookrunner January 2022			

This brochure is for informational purposes only. It is not intended as an offer or solicitation for the purchase or sale of any financial instrument, investment product or service. The information contained herein, has been compiled from sources believed to be reliable, but no representation or warranty, express or implied, is made by RBC Capital Markets or any of its businesses or representatives, as to its accuracy, completeness or correctness. This brochure is intended for sophisticated investors and may not be suitable for all individuals. Readers should conduct independent due diligence and not rely on any credit rating or other opinions contained within this document when making an investment decision. Canada, the U.S., and most countries throughout the world have their own laws regulating the types of securities and other investment products which may be offered to their residents, as well as the process for doing so. To the full extent permitted by law, neither RBC Capital Markets nor any of its businesses or representatives, accepts any liability whatsoever arising from the use of this brochure. This brochure is not, and under no circumstances should be construed as a solicitation to act as a securities broker or dealer in any jurisdiction by any person or company that is not legally permitted to carry on the business of securities broker or dealer in that jurisdiction. No matter contained in this brochure may be reproduced or copied by any means without the prior consent of RBC Capital Markets. To U.S. Residents: This brochure has been approved by RBC Capital Markets Corporation, which is a U.S. registered broker-dealer and a member of NYSE, FINRA and SIPC; and accepts responsibility for this brochure and its dissemination in the U.S. To Canadian Residents: This brochure has been approved by RBC Dominion Securities Inc., which is a member of IIROC and CIPF. To U.K. Residents: This publication has been approved by Royal Bank of Canada Europe Limited ("RBCEL"), which is authorized and regulated by Financial Services Authority ("FSA"), in connection with its distribution in the United Kingdom. This material is not for distribution in the United Kingdom to retail clients, as defined under the rules of the FSA. RBCEL accepts responsibility for this brochure and its dissemination in the United Kingdom. To Australian Residents: This material has been distributed in Australia by Royal Bank of Canada-Sydney Branch (ABN 86 076 40 880, AFSL 246521). If this material relates to the acquisition of a particular financial product, a recipient in Australia should obtain any relevant disclosure documents prepared in respect of that product and consider that document before making any decision about whether to acquire the product. To Hong Kong Residents: This publication is distributed in Hong Kong by RBC Investment Services (Asia) Limited and RBC Investment Management (Asia Limited), a licensed corporation under the Securities and Futures Ordinance, or by Royal Bank of Canada, Hong Kong Branch, a registered institution under the Securities and Futures Ordinance. Hong Kong persons wishing to obtain further information or any of the securities mentioned in this publication should contact RBC Investment Services (Asia) Limited or Royal Bank of Canada, Hong Kong Branch at 17/Floor, Cheung Kong Center, 2 Queen's Road Central, Hong Kong (telephone number is 2848-1388). To Japanese Residents: Securities business (as defined under the Financial Instruments and Exchange Law) in Japan will be carried out by RBC Capital Markets (Japan) Ltd. Tokyo Branch in compliance with all applicable laws and regulations. Banking business (as defined under the Banking Law) in Japan will be carried out by Royal Bank of Canada, Tokyo Branch in compliance with applicable laws and regulations. RBC Capital Markets (Japan) Ltd. Tokyo Branch is a member of the Japan Securities Dealer's Association (JSDA). To Singapore Residents: This brochure is distributed in Singapore by Royal Bank of Canada and RBC (Asia) Limited, registered entities granted offshore bank status by the Monetary Authority of Singapore Act (Cap. 186).

RBC Capital Markets is the global brand name for the capital markets business of Royal Bank of Canada and its affiliates, including RBC Capital Markets Corporation; RBC Dominion Securities Inc. and Royal Bank of Canada Europe Limited. © Registered trademark of Royal Bank of Canada. Used under license. © Copyright 2023. All rights reserved. XP_Multipage_01.23