



Capital
Markets

2021 Municipal Treasurers Roundtable

DECEMBER 2021

TABLE OF CONTENTS

03		Panelists & Moderators
04		Municipal Treasurers Key Themes
05		Municipality Financial & Economic Update
10		Inflation
11		Municipal Borrowing
12		ESG
21		Select Canadian Municipal Issuers
22		Select RBC-Led Transactions in 2021

PANELISTS



Errico Cocchi
Head of Pension Investments
and Debt Financing,
City of Montreal



Christine Dacre
Chief Financial Officer,
TransLink



Patrice Impey
Chief Financial Officer, General
Manager of Finance Risk and
Supply Chain Management,
City of Vancouver



Heather Taylor
Chief Financial Officer
and Treasurer,
City of Toronto



Peter Urbanc
Chief Executive Officer,
Municipal Finance Authority of
British Columbia (MFA)

MODERATORS



Mansoor Khan
Director, RBC Government
Finance



Kevin Martin
Director, RBC Government
Finance

MUNICIPAL TREASURERS KEY THEMES

- 1 Positive but Cautious Outlook:** Municipalities are approaching the 2022 budget planning process with Covid considerations still top of mind. For most jurisdictions, property tax revenue was stable in 2021 and not negatively impacted by the pandemic. Municipalities benefited from the economic rebound in Canada with a recovery in user fees (parking etc.) and a sharp increase in land transfer/real estate taxes on the back of strong housing markets in 2021 and the outlook for 2022 is generally positive.
- 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 allowing many jurisdictions to avoid deficit positions for their operating budgets. Municipalities with large transit systems received extra support. Canadian municipalities are generally not permitted to budget for operating deficits and must plan to cover any unforeseen shortfalls in their operating budgets within a year, so cost containment measures are critical to achieving balanced budgets.
- 3 Transit:** Municipalities with responsibility for transit continue to see reduced levels of revenue. While transit ridership numbers have recovered from the lows of 2020, they remain below pre-pandemic levels and are vulnerable to future Covid-related travel patterns. Transit operators are planning based on what the “future of work” will look like. Many are expecting businesses to provide the flexibility for employees to work from home for a couple days a week and the challenge will be to adjust the level of transit services to the new habits of commuters.
- 4 Inflation Pressures:** Construction inflation, wage inflation, and higher costs for fuel are among the concerns for Canadian municipalities as they navigate the rebound in economic activity and the associated inflationary pressures. Some of the larger municipalities in Ontario are drawing from their co-operative experiences in pooling their resources during Covid (for PPE equipment and other supplies) to work together on procurement initiatives for other goods and services to increase their purchasing power.
- 5 Borrowing Programs:** Canadian municipalities continue to offer investors attractive value relative to other government credits as local governments must balance their operating budgets in a world where the provinces have generally seen deficits and their respective borrowings increase. There was C\$5.9 billion in total municipal issuance in 2021, a record high for the Canadian municipal sector. The forecast for 2022 issuance is slightly lower as MFA BC (a top 3 borrower in the sector) is expected to have less to issue in 2022. 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 the social and sustainable aspects in addition to the traditional green bond issuance. It has also been proven that there is a solid demand from the investor side for municipal ESG credit, along with a keen interest in reporting so investors can see where proceeds have been allocated and see the impact of the ESG bond. Canadian municipalities are driving the change in the public sector in publishing ESG performance reports with a view to become more transparent with metrics and use of proceeds. Municipalities are advocating for standardization in broader public sector ESG reporting.

MUNICIPALITY FINANCIAL & ECONOMIC UPDATE

Kevin Martin (RBC): Welcome everyone to the second annual Canadian Municipal Treasurers Roundtable. My name is Kevin Martin and I'm a Director in the Government Finance group at RBC Capital Markets and I'm joined by my colleague Mansoor Khan Director, Government Finance and together we'll be moderating today's roundtable discussion.

We're very pleased to be joined by senior Treasury officials from across Canada for our discussion today which will be organized around the following general topics:

- An update on the financial and economic health of each jurisdiction
- Update on the transit file from TransLink and City of Toronto
- The borrowing programs and anticipated requirements for 2022
- ESG and sustainable finance initiatives for the members around the table

Heather, let's begin with City of Toronto. During our panel discussion last year, there was a considerable amount of uncertainty around the fiscal outlook given the circumstances surrounding the pandemic. Fast forward a year now and the picture is a little clearer, as the general economy seems to be rebounding well from depressed levels last year. Can you give us an update on the City of Toronto from a fiscal and economic perspective?

As we're planning for 2022, it continues to be a Covid budget. That is how we're approaching our financing for 2022.

Heather Taylor, City of Toronto

Heather Taylor (Toronto): As we're planning for 2022, it continues to be a Covid budget. That is how we're approaching our financing for 2022. We are lucky that we've had enormous support from other levels of government throughout Covid. In 2021 alone we've received just shy of C\$1.6 billion in support from other levels of government and received over C\$2.7 billion in total since Covid started. Of this total, just under C\$800 million was for our transit system. 2022 will be a Covid budget because one of the main drivers of all that support is transit and where we are on ridership. If we use SARS as an example, the financial impact of SARS was as not as severe as Covid, but it took us 5 years to recover from a transit ridership perspective, for context. What we're hoping is that with businesses returning to a work environment in 2022, ridership will come up and the reliance on other levels of government for Covid support won't be as significant. This forecast is based on modeling. I would say that from an increasing costs perspective, we're all watching inflation numbers. We are lucky that we're somewhat insulated from increased costs

given the fact that 85% of our workforce is bound by union contracts and those contracts take us out to the end of 2024. We can hope that the management of our major expenses can get us through the remainder of what we're deeming to be the end of the pandemic. Is there anything else that you want me to touch on?

Kevin Martin (RBC): Can you talk about trends you're seeing in property tax revenue and maybe the home transfer tax in Toronto.

If we use SARS as an example, SARS was as not as severe as Covid, but it took us 5 years to recover from a transit ridership perspective.

Heather Taylor, City of Toronto

Heather Taylor (Toronto): Property tax is pretty stable, predictable and an incremental amount of income that is not going to help or hinder us. We didn't actually have any negative impacts on the property tax base throughout Covid, we didn't see the non-payment or the bad debts. I would say that revenue sources are stable. From a municipal land transfer tax ("MLTT") perspective, the real estate markets have rebounded substantially and we are reaping the benefits of that, I'm going to put a caveat there though. A couple of years ago I announced a pivot away from a reliance on MLTT to fund our operating expenses and really what Covid has done, if I want to say there's a silver lining in it, we are pivoting to having MLTT fund our capital plan. Which in actual fact makes us more stable, it eliminates vulnerability of an unreliable tax or revenue source for predictable expenses, so we are using the solid real estate market to pivot us more to where we want to be, and where we need to be from a stable perspective. MLTT has done well, but it's not helping us on the operating basis. It's actually helping us fund our capital plan.

Kevin Martin (RBC): That is another sign of fiscal prudence from the City. Is that a multi-year process or can you pivot right away? What's the timeframe in terms of moving towards your goals there?

Heather Taylor (Toronto): It is a multiyear process, I announced it 2 years ago and we started doing it then. We are going to make more of a progress in the pivot this year and in 2022. The key here is Municipal Finance is a little bit different, you have to have a balanced budget, and the way we were funding our capital plan was contributing from our operating base. Now, what this does, is it puts less reliance on the operating base and allows us to direct our funds to other important files and allows to dial up or dial down based on the markets on our capital side. Hopefully, it'll be more stable going forward. The contribution on an annual basis used to be in the neighborhood of C\$350 million. We've got a formula that we are

following to wean ourselves off of any operating funding capital. But, that is going to take time. I'm optimistic that we're actually going to be able to advance that quite substantially in 2022.

Kevin Martin (RBC): Thank you Heather. Errico, let's bring you into the discussion here for an update on City of Montreal and how 2021 has been from a financial and economic standpoint for the city.

Errico Cocchi (Montreal): 2020 was a bit tough for Montreal with respect to the effects of the pandemic. But the way we're structured, almost 70% of our revenues are based on property taxes. So, it was fairly stable last year, and there was a bit of a concern regarding the percentage of collection for property taxes but our collection percentage ended up close to normal this year. Also, with everything that happened we received significant support from the senior levels of government, the only change in 2021 was a freeze on taxes, there were no increases for Montreal residents, which was budgeted earlier in the year so revenues were fairly stable on property taxes. For real estate transfer taxes, the real estate market has gone up this year which benefits us.

Things have been getting better in Montreal and Quebec since some restrictions were lifted in the summer. We are slowly coming back to a new normal. There is a rebound in economic activity, GDP numbers for Quebec were pretty good this year. Obviously not everything is perfect, similar to Toronto, the transit ridership is still around 50 to 60% of pre-pandemic levels, and there is a return to the office slowly in Montreal. This will probably increase a bit more at the end of the year or early next year, but that's one of the big issues there.

For next year, since we've just gone through municipal elections recently, there's a new executive committee that was formed. The budget for next year has not been formalized yet because of the election. We will get some information on that fairly soon. In retrospect with everything that has happened, and still happening as the pandemic is not over, I think the stability of our revenues has been fairly positive. Expenses have gone up, related to the pandemic, but we are positive. Montreal still has a lot of construction going on for city purposes and in the real estate sector. So activity is picking up and it's quite positive on that front.

Kevin Martin (RBC): Thanks, Errico. Can you just touch on the distinction of the way Société de transport de Montréal (STM) plays on the transit file for the city in terms of? I think it's a little bit more aligned with the province, as opposed to directly underneath the city.

Errico Cocchi (Montreal): With the STM, most of the projects are financed close to 80% by the provincial government. The rest is financed by the city, and then the revenues from the STM go through a structure called IFPM. Most of the expenditures relating to big projects the provincial government pays almost 80%. The transit community will get a lot of support related to Covid, that's really where it hurts a bit more. However, the structure puts part of the cost burden on the city, but most of it is on the provincial government.

Kevin Martin (RBC): Christine, certainly transit is your main business in the lower mainland BC. Can you give us an update on how ridership numbers have been trending in 2021 compared to what you budgeted at the beginning of the year?

We're confident that ridership will come back, transit is very important in our region and we had one of the highest ridership growths pre-pandemic.

Christine Dacre, TransLink

Christine Dacre (TransLink): Our ridership numbers are forecast for this year to be about 7% below budget. However, transit revenue is forecast to be just under 2% because of the mix in our various fare products that we sell. The recovery of our ridership has picked up significantly since September. We were on a slow uptick, but when universities and schools went back to in person classes in September, and many restrictions on events, and social activities have been lifted and with the vaccination rates rising we have seen an increase. Our latest average week day journeys are at 57% of pre-Covid levels and the average weekend journey is at 68% of pre-Covid levels. So it's interesting to see the weekend journeys are recovering at a better pace than the week day journeys. That is really related to the fact that a lot of people are still working from home. As we see people start to come back to work, the week day journeys will increase, however, longer term, we probably won't quite hit the ridership peaks that we saw previously. We believe the future of work will see more businesses move to hybrid setups providing the flexibility to work from home for a couple days a week and we believe that will impact our services and we will have to adjust to that. In the past we've been used to seeing those peaks in transit ridership in the morning and at the end of the day and we believe those peaks are going to flatten out and that will be our challenge to adjust the level of services to what that new normal is going to look like.

Kevin Martin (RBC): Thank you Christine. The province was fairly supportive throughout the whole pandemic process. I assume that the discussions are ongoing in terms of future supports and can we get an update on there.

Christine Dacre (TransLink): The relationships that we have with the senior levels of government, I think is similar across the board here, the provincial and federal governments' support have been huge. We received C\$660 million from the provincial and federal governments, and that really helped our net losses in 2020 and 2021. The challenge for 2022 and beyond because of that significant change in ridership, is really that longer term systemic problem we have to deal with. There's also fuel tax revenue. Fuel tax revenue is something that we were hit with. It declined because of Covid and as people work from home, they're not driving as much. Also, another issue with our fuel

tax revenue is that people are moving to electric vehicles. We are currently updating our 10 year investment plan and we're working with our mayor's council and the provincial government on a new funding source that can fill that gap. We're confident that ridership will come back, transit is very important in our region and we had one of the highest ridership growths pre-pandemic. We're confident that it will come back. It's just a matter of when and how fast and that's what we're keeping our eye on, but the provincial government and the federal government have been a huge assistance to us and they continue to be talking to us.

Kevin Martin (RBC): The point on electric vehicles is an interesting one and I know that in terms of TransLink's fleet, you guys in many senses were ahead of the game by many years by electrifying the buses for most of your fleet. As well, as I believe the sky train is almost completely electric. Can we get an update on your future capital investments for the rolling stock, I guess electricity is top of mind and those sort of purchases?

Christine Dacre (TransLink): We have a low carbon fleet strategy that has been approved and we will be building it into our next 10 year investment plan. Our plans are to replace all of our buses as they reach the end of their life with battery electric buses. That obviously comes with significant other investments in the infrastructure. We are building a new transit center that will be 100% electrified. It will house 100% battery electric buses. We do have a plan, it's an aggressive plan, but, we also need to be flexible because we can't put all our eggs in one basket. Hopefully there'll be other technologies and improvements to the battery electric buses and infrastructure, but we want to make sure that we move forward as quickly as we can. At the same time, we want to be open to new technologies that come up.

Kevin Martin (RBC): Thank you for that Christine. Let's stick with our British Columbia-based issuers here. Patrice, welcome to the panel this year. I'm curious if you can give us your perspective over the situation that City of Vancouver has gone through over the last 2 years with Covid and challenges and opportunities that you've seen through the last year.

Patrice Impey (Vancouver): Thanks. Nice to see everyone at least virtually. It's definitely been an interesting couple of years for Vancouver. We had some pretty significant revenue impacts for us. The majority of our revenue is property tax and utilities, very predictable. We actually anticipated we'd have an increase in delinquent payments and we delayed the payment date as I think a lot of cities did. And in fact, we had pretty much the exact same payment trends as we had in previous years, which was fortunate. About 25% of our revenue is quite variable and that's the piece that was impacted. Certainly, parking revenue was impacted, as well as our program fees. Most of our expenses are fixed such as people expenses and facility expenses. We did receive some funding from the provincial government through the restart program which covered less than 25% of our revenue loss. We adjusted the rest

through service adjustments and staffing and wage reductions within the city. That was how we went through 2020, and we are fortunate that we have a revenue stabilization reserve that we had built up over the years for this kind of a situation. We were able to balance the budget in 2020 using that reserve.

As we went through Covid, and I think all of the big cities experienced the same thing, the housing situation became a big issue and just recognizing how much of our population was vulnerable.

Patrice Impey, City of Vancouver

In 2021, we're also balancing the budget with the use of the stabilization reserve. The budget didn't fully balance even with a tax increase of 5%. We have a council that wants to do a lot of things through this pandemic, and we are continuing with our strategies. Like Toronto, we are looking at the financial situation improving this year. As Christine said, people are downtown more and starting to move around. Being an outside-focused city, we saw an increase in activity in the parks over in 2021. Parking revenue has also improved quite a bit. That's helped us in 2021. We still don't think we'll be back to pre-Covid levels in 2022, because not everybody is going back to work in 2022, but it's looking much better and we're not expecting to draw from our reserves in 2022.

Economically, Vancouver has done well. Even through this tougher period we've still had a lot of investments. Our technology sector is growing and doing really well. As a City, we don't get a lot of direct benefit to city revenues from that activity, but it does help us as far as a noticeable increase in energy and momentum of the City. Our development had a little bit of a slowdown in 2020, as everyone was trying to understand what that might mean for the economy, but it has since picked up. About a 3rd of our capital plan is funded from development revenues, so we had slowed things down a little bit in the middle of our capital plan last year, but it looks like those are picking up again.

We're in the midst of developing the Vancouver plan, which is to set up the development and land use plan across the city. That'll look at how we're going to grow the density, looking at the transit needs and how it translates to expansion, and how we develop the city and build the city. There's a lot of really interesting work happening this year and that's going to really set the stage for the future. We've got the Broadway subway line that's being built and that's going to be a real growth driver for the city. We're also starting discussions of expanding that line out to UBC as well. So, a lot of good transit investment in Vancouver which should lead to additional external investment opportunities. So we're seeing the turn and looking forward to that in 2022.

Kevin Martin (RBC): Thank you Patrice. As you go through the planning process now over the next number of years, Covid stays in the back of one's mind, doesn't it? Can you comment on the potential long term implications of the pandemic (if any) on the City's finances?

Patrice Impey (Vancouver): As we went through Covid, and I think all of the big cities experienced the same thing, the housing situation became a big issue and just recognizing how much of our population was vulnerable. We got quite a bit of funding from the federal government through the reaching home program and others to purchase hotels and turn them into permanent housing for people, and we are continuing to look at our alignment with the federal government around housing. The social issues became a higher priority through the pandemic and that's really finding its way into what our plans are this year as well. So, that was certainly one of the bigger trends that we saw.

Kevin Martin (RBC): Thank you and we are going to pick up on the social housing theme a little further on in the discussion. Peter, let's bring you into the conversation. We've heard about Vancouver's experience. You have a little bit of a broader view on British Columbia, given your capacity is a regional infrastructure bank for local governments in British Columbia. Can you provide an overview for us of how MFA BC fared in the last year in terms of loan performance? Any visible trends that stood out from your perspective?

Peter Urbanc (MFABC): Thanks Kevin. Loan performance continues to be stellar at MFA. We have never had a delinquency or loan loss in our 50 plus year history and that track record has continued throughout Covid. Everybody here has talked about how local governments over the last few years tightened their belts. Local governments in Canada must plan for a balanced budget every year. That legislation forces local governments across Canada to act like a business - and that is exactly what has happened in 2020 and again in 2021.

Loan performance continues to be stellar at MFA. We have never had a delinquency or loan loss in our 50 plus year history and that track record has continued throughout Covid.

Peter Urbanc, MFA BC

In BC, as Patrice mentioned, we saw limited direct monetary support from higher levels of government, away from social housing perhaps, in terms of helping basic municipal budgets. Patrice talked about how the Province only helped fill about 25% of the negative budgetary impacts to Vancouver due to Covid - I would say that was relatively consistent for larger municipalities across the province. The Province did use a

formula that helped smaller local governments a bit more than larger local governments - and that was quite helpful to some who didn't have the capacity to cut costs quickly. The MFA lends predominantly through regional districts to local governments or directly to regional districts and that lending becomes a joint and several liability which produces a fortress like system for the MFA. As I've said, we have never a delinquency in our entire history. The regional districts, and really the largest 8 or so, are the main entities that we lend to and they then on-lend to the broader system. When, historically, say a large mine closure would have significantly impaired small town's revenues, the Regional District continued to make all payments due to the MFA.

We are currently dealing with two tragic emergency events in this Province: the forest fires throughout the summer and now the historic floods. The local government system is showing its resiliency through this very difficult period. Let's talk about the sad case of Lytton, B.C. which was burned to the ground and houses and municipal infrastructure was absolutely ravaged. You had Lytton's local government staff immediately scattered across the province. MFA did have loans outstanding to Lytton, but they have continued to be serviced by the Thompson-Nicola Regional District. Despite those difficulties, the way the system is set up really enhances the credit protection for bond holders. We end up getting paid despite these terrible scenarios.

Kevin Martin (RBC): That's a good point Peter, it's unfortunate that BC has had more than its fair share of natural disasters this year and I realize it's still a bit early to talk about the impacts of the recent flooding we've seen but, maybe just your impression on what the cleanup and rebuild process might look like, for some of these regions as they go through the process; will that result in an increase in loan requests? How do you think some of that is going to be dealt with?

Peter Urbanc (MFABC): It is far too early to know what the overall impacts of these floods will be. There is no doubt that these will be very large impacts and there's no doubt that the provincial and federal governments will offer significant help. The traditional approach has been that in these types of emergency situations, typically about 80% of the cost to rebuild municipal infrastructure, in addition to helping businesses and individuals, does flow from the provincial government who then often can share some of those costs with the federal government. We are in the early days and it's hard to know what the overall costs and impacts will be. I can give you a little bit of what MFA is seeing so far that may be of use for investors. First, if you look at MFA's existing loans to the impacted areas, we're looking predominantly at 7 local governments and 1 major regional district where most of the flooding impacts have been felt - MFA has about C\$95 million of outstanding loans to those impacted areas. Most of those are long term loans. We only have about C\$1 million of short-term loans. Those loans are all current and we don't expect any difficulties on that front as those local governments, including the regional district, have significant cash reserves. Obviously, they are going to have significant expenses as well, but we expect a lot of help from the Province on that front.

There are insurance policies in place as well for some of the damaged infrastructure, but a big proportion will be uninsured. Flood insurance is complex. It is often tricky to ascertain what the primary cause of flooding damage was - whether the sewer backed-up, the water table rose or overland water caused the damage. As I said, provincial disaster relief can provide 80% of the cost to rebuild public infrastructure to pre-disaster conditions. With that program coming in place, MFA will be able to offer assistance to local governments, for revenue anticipation short-term lending. The DFA is claims based, so local governments will only get paid during an emergency after they've submitted the claim. What MFA can do is provide short-term lending as soon as the local government has been accepted into the program. So we may see a limited increase in short-term loans on our balance sheet and those will be backed by a promise to pay from the Province.

Throughout Covid, we have had revenue anticipation lending available - but the program has not been used at all really. In the early days of Covid we were worried about property tax revenue not being collected but in the end there were no problems with tax collection as extraordinary support was provided to taxpayers and businesses via federal and provincial programs. Local governments were able to right-size and batten down the hatches by reducing expenses. I should mention MFA does not lend to public transit, which of course has suffered sharply from the low ridership due to Covid.

I can't really tell you how much this short-term lending will go up but again, during Covid none of it was used. We have ample commercial paper availability right now to provide hundreds of millions of dollars, if that's necessary. In terms of expected growth of long-term lending, that will take time to estimate because there is a very long process involved in BC for LGs to borrow long term - you must have public, provincial, and then MFA Board approval, a process that can take about a year. I do expect that we'll have likely some longer term lending increases, but we won't see that for quite some time, likely in 2023 or later.

Kevin Martin (RBC): Thanks Peter. I'd like to bring Patrice and Christine back in to the discussion. For the benefit of our international investors, who will know the headlines of floods in BC but maybe not familiar with the geographic areas affected, could you help address the impacts that you're anticipating over the near term?

Christine Dacre (TransLink): I can start. Abbotsford and Sumas were the hardest hit in the lower mainland. It is not in TransLink's service area. We do not provide transit service to them, BC transit does. It also did not impact our infrastructure. We don't have any facilities or infrastructure in that area. So, it didn't impact us, however supply chains were an issue. Obviously, we're hoping that the highways are going to open up, I think very soon. We can't get goods out past Abbotsford and we can't get some goods that are coming from the east into the lower mainland. We have some parts that come from Ontario and Quebec. What we've done is we've rerouted them through the US on the interim. We are working on very creative ways in getting some of those critical parts to us. The other thing is fuel shortage, and we're limited to the amount of fuel we can purchase in the Province. However, TransLink is deemed an essential service so our fuel supply for our revenue vehicles is secure, so the main impact of the flooding to our business has been the supply chain and we've had to make adjustments for it.

Kevin Martin (RBC): Patrice, I guess it's the same situation for the City of Vancouver, in terms of maybe not as much of a direct impact from the floods, but certainly knock on effects? The port of Vancouver was severely affected as a result of the transportation blockages.

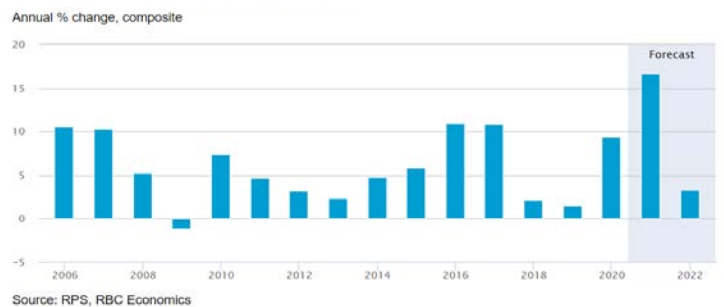
Patrice Impey (Vancouver): Yes it did. As far as the flooding itself, fortunately, Vancouver fared reasonably well, more general storm impacts, trees down and things like that. Most of that was fairly manageable. We did have emergency operations set up, but we definitely fared much better than the Abbotsford area. In addition to the highways, the rail link to the port was also down and that's pretty significant. A lot of the transport comes in and out through the port and through rail as well, which I understand is, if it's not back up and running, it is going to be in the next few days. That was a challenge for the city itself and the port. For us, for our work the impact really is a supply chain issue. We do have some significant construction projects and the concern is how that's going to impact the bids for our work. There are many demands on the industry and now also this uncertainty around getting their supplies in. So we're just keeping an eye on the situation and hopefully some of the delays clear up as they're able to re-open the rail and the highway corridors that were affected.

JOB VACANCIES TOP 1 MILLION



Source: Statistics Canada, RBC Economics

HOUSE PRICE INCREASES TO MODERATE IN 2022



Source: RPS, RBC Economics

INFLATION

Kevin Martin (RBC): Thanks Patrice. That's a good segue to the next segment that we want to discuss. Inflation is getting a lot of attention these days. Everybody's seeing prices go up. Whether it's the grocery store, or at the gas pump. Heather, you touched on the City of Toronto's experience with price pressures and not necessarily seeing it immediately right now as there are some built in stabilizers. I'm curious on the medium term view, 2 to 3 years out, do you sense that there could be some inflation pressure for the city? Whether it's a cost input for your operations or salaries?

Heather Taylor (Toronto): With regards to expenditures, whether they be capital or operating in nature, we started it in 2020 and actually made a significant amount of progress in 2021. We've been working with the Greater Toronto & Hamilton Area (GTHA) on certain initiatives, and one of them is procurement. We're focusing on how we as a region procure differently. There's been some progress made on creating some cooperative procurement arrangements, and looking at the purchasing power that will come together as a region. We've worked with EY (Ernest & Young) on some modeling and what that can look like. We've identified some very short term opportunities which we already have underway. Our hope is that we're going to be able to manage some of those increased costs that we're experiencing in some of the large areas of our spending through these cooperative arrangements - fuel being one of them. Toronto has a significant fuel contract that now the GTHA is actually going to participate in. We're trying to look at new innovative ways of trying to manage the costs, rather than everybody trying to find their own solutions and combat the challenges ahead. That is a significant and material opportunity for not only Toronto, but the GTHA. We started it off with the procurement of PPE through a co-op that works with the Ontario hospitals and have now expanded that into our pharmaceutical purchases across the system. Some might not know this but Toronto has significant pharmaceutical expenses. We have veterinary services, paramedics, our public health unit, and so when you start looking at it, it all adds up. What we're trying to also do is demonstrate, as we have our hand out to other levels of government, we're demonstrating how hard we're trying to manage our own expenses. So, I would say that Toronto, working with other municipalities, is trying hard to insulate ourselves as much as possible from the inflationary experiences that are obviously in front of us.

We're focusing on how we as a region procure differently. There's been some progress made on creating some cooperative procurement arrangements, and looking at the purchasing power that will come together as a region.

Heather Taylor, City of Toronto

Kevin Martin (RBC): Yes, it's an interesting point and perhaps a silver lining behind Covid in terms of lessons learned and best practices that we can continue going forward. Errico, are you starting to see some price pressures build or do you anticipate price pressures building as we go forward here in the City of Montreal?

We'll see what happens in 2022, but for now, we haven't heard that much pressure regarding costs. Going forward if the demand keeps being strong, I think we won't be immune to some cost increases.

Errico Cocchi, City of Montreal

Errico Cocchi (Montreal): Most of the work in the City has been contracted months ago. Those costs are usually already established. Going forward, intuitively, you would expect that we will be impacted as everyone is, especially related to construction where there's currently a big shortage of labor. For the direct expenses relating to the city's employees, I think there's only one bargaining agreement that's ending this year with the police association. Besides that, all the other employee agreements are not up for re-negotiation for another few years. So we may see the impact in a few years but it depends if you're in the transitory camp regarding inflation or not in the transitory camp. We'll see what happens in 2022, but for now, we haven't heard that much pressure regarding costs. Going forward if the demand keeps being strong, I think we won't be immune to some cost increases. Regarding large construction projects and things like that, those are part of our capital spending program. It's a smaller part of the yearly budget, and those projects are planned over 10 years. Regarding our revenues, the mayor promised that taxes will not increase more than inflation but this year it will be interesting to see if the inflation on an annual basis could be as much as 4 or 5%. We'll see if they'll raise taxes by 4 or 5% but it should be closer to 2% like years past. That's obviously political so we'll see what happens there.

Kevin Martin (RBC): I think you bring up a very interesting point and I know it is quite political when we talk about passing along those costs to the end user, whether they be taxpayer or consumer. Christine, you might see it first-hand in terms of the transit fare box and how you're planning future fare increases. Does that come into play in the medium term as you look at the revenue planning process?

Christine Dacre (TransLink): Absolutely, when Covid hit we did not put our planned fare increase in 2020. We recognized that there's only so much the public can take, so we didn't implement a fare increase. We did put an increase this year (July 1st), it was +2.3%.

A risk that we see is just the capacity in our region to do all of the work that needs to be done.

Christine Dacre, TransLink

We were also able to benefit in getting provincial funding with their emergency relief funding. They contributed C\$44 million towards us not increasing our fares more than 2.3% through 2024. So that's our plan, but absolutely beyond that, we need to look at what is that fare rate increase and looking at what the region and what the public can afford and the pressures on them, definitely comes into that conversation. I would like to comment a bit on the pressures we have in the construction phase of all of our projects as well. We are certainly seeing increased inflation on construction especially. As we're developing the new ten year investment plan, we're revising all of those assumptions that we had in those expansion projects. We'll be able to refresh the planning which will still need the funding to support that increase cost as well. I would also say a risk that we see is just the capacity in our region to do all of the work that needs to be done. Not only for TransLink and our expansion plans, but also, with the result of the flooding and as Peter mentioned, the fires. In order for the region to rebuild, is there enough capacity, including workers etc. out there to do what is going to be needed to be done? So that, on top of the inflation concern, is something that we're definitely keeping an eye on.

Kevin Martin (RBC): Patrice, I guess it's the same sort of pricing pressures you're seeing within the City of Vancouver?

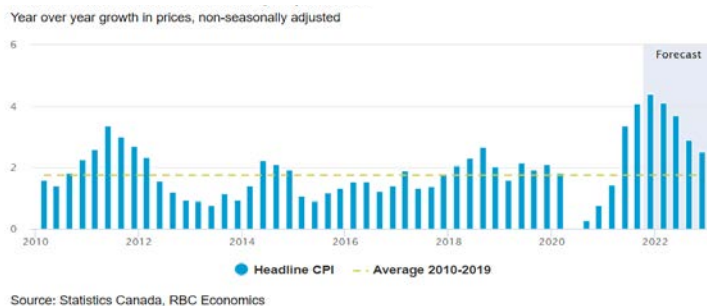
Patrice Impey (Vancouver): I would say similar, most of our collective agreements continue through 2022 so that question won't come up for us for a few years. We've seen construction inflation at a high rate, much greater than CPI growth, for a number of years in Vancouver. That has been a factor for some time and we build that

into our capital plan. I would agree with Christine, there's just a lot going on right now and competition, so it might be pricing and it might be just even the availability of bidders on some of the work. And so, possibly aligning our capital plan in different areas, and we'll see how that unfolds. But inflation wise, we've been experiencing that for the last couple of years already.

Kevin Martin (RBC): Thanks. Peter, a last word to you for any insight from your side on inflation pressures in British Columbia.

Peter Urbanc (MFABC): I would have mentioned exactly the same points. Construction inflation has been very high for a long time in British Columbia. Wage inflation for Police is a current issue for smaller and medium sized local governments right now. The contract with the RCMP has just been renegotiated and that is going to have significant impacts because it is a backdated contract, I believe going back 5 or 6 years calling for a 24% increase of their wages over that period of time. Despite all the stories about significant wage inflation in the press, I would say so far that's been mostly a US phenomenon. Although we do have a very low unemployment rate in Victoria, for example, the lowest in the nation, I believe - it is becoming challenging to hire people all across a whole variety of areas in local governments. I do expect that there will be higher wage inflation going forward for a few years.

INFLATION RATE TO RUN HOTTER THAN PRE-PANDEMIC



MUNICIPAL BORROWING

Kevin Martin (RBC): Great, thank you. Peter, let's stay with you as we go into our next segment which is borrowing. 2021 has been a record year in terms of debt issuance for the Canadian municipal issuers. We saw C\$5.9 billion in total municipal issuance in 2021 which is a 3% increase from 2020. MFA BC was a big part of the total borrowing this year, at just shy of C\$2 billion. In fact, for the 5 issuers around the table today, if we total up what you borrowed this year, it represents almost 75% of the total borrowing for all Canadian municipalities (excluding the non-rated Quebec municipal issues). The municipal sector also enjoyed a very low cost of borrowing relative to the provinces. This year municipality credit spreads

really tightened in vs. Ontario and remain at levels that we haven't seen since the early 2000's. There is still very good demand from the investor base, both domestically and international for Canadian municipal bonds. Peter, can we get your thoughts on MFA BC's borrowing program in 2021 and what you're anticipating for 2022?

Peter Urbanc (MFABC): Yes spreads have continued to compress and I think they'll remain here at these tighter levels. Municipalities will continue to offer very attractive relative value, relative to other layers of government - and part of that is a supply issue. We've had federal, provincial and regional governments across the world

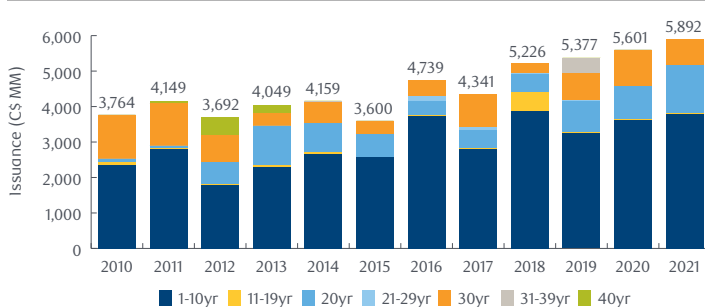
massively increase their borrowing in concert due to Covid. Whereas local governments have had to balance their budgets. Obviously, local governments can borrow for capital purposes and that component has grown, but the growth has been predictable, very stable and nothing close to the deficit-induced borrowing of the other layers of government. From a relative value, call it rarity value perspective, municipal debt and MFA debt present great value in my view.

For 2021, MFA had a big borrowing year. We had quite a few refinancing's to deal with and some firsts for MFA. We borrowed just a little under C\$2 billion dollars for the year. We were able to issue for the first time in a very long time, a new 20-year bullet issue. Typically MFA has issued 10 year and 5 year bonds, but we were able to marry a desire to extend our curve with Member requests for longer amortization periods and locking-in long rates. For 2022, because our refinancing needs aren't as heavy, our borrowing needs will tick down a little bit. We are expecting a program of between C\$1.4 and 1.8 billion. As we've discussed, our long-term borrowing will not pick up next year due to the floods. It will take longer than that for that to start coming into play. Our short-term borrowing may go up a bit. We have a modestly sized commercial paper program. We can always increase the size if we need to. But as I mentioned, we have quite a bit of capacity within the existing commercial paper program to deal with any increases in revenue anticipation.

Kevin Martin (RBC): Excellent. Thanks. So you have brought up the 20 year could you explain for our readers why the MFA shifted out the curve to issue 20 years?

Peter Urbanc (MFABC): MFA issues bullet securities in the capital markets, and we on-lend those proceeds to borrowers on an amortizing basis over 5 to 30 years. So we issue a large bullet bond, but we have to recreate loans that are amortizing over various terms to our customers. When we issue C\$500 million, we may have 30 Members who may be borrowing for 50 different projects. We typically have issued a 10-year bullet bond to initiate new lending operations to our Members. We pass-on the 10-year coupon to our customer and then we've reissued in 5-year increments so that we can recreate these 10 to 30 amortizing loans. For many reasons,

ANNUAL C\$ MUNICIPAL ISSUANCE



Source: RBC Capital Markets

that construct has worked very well over the last 30 years - mainly because interest rates have been dropping. Local governments have very low amounts of debt in BC and they tend to want to pre-pay their debt. This construct where we issued a 10 year, and then 5 year increments, often allows them to early-pay the loan to MFA at those increment points, especially in environments where rates were coming down - as MFA takes no interest rate risk. So, unlike a bank, that may borrow short and lend long, MFA has no deposit base which tend to be stable and is therefore not willing to take a view on the shape of the curve. We're a pass-through entity. With rates continuing to drop over the last few years, we had clients increasingly asking us to lock-in rates for a longer period of time in addition to a large grouping of clients amortizing over 20 years or longer. That is what allowed us to issue this 20-year bond - we need clients amortizing over 20 years or longer - and also interested in locking-in rates for 20 years or longer.

Municipalities will continue to offer very attractive relative value, relative to other layers of government and part of that is a supply issue. We've had federal and provincial governments and regional governments across the world massively increase their borrowing due to Covid. Whereas local governments have had to balance their budgets.

Peter Urbanc, MFA BC

MFA's debt maturity schedule is shorter than a typical municipal or a provincial issuer and so we also strategically want to lengthen the term of our issuance. We hope 20 years and possibly 30 years to become a more regular part of our issuance curve. The 20-year issue been a great experience for us. We priced at a tight level relative to our 10-year and 5-year bonds which clearly signaled demand for MFA long-dated securities. Our curve is very flat, flatter than any other municipality and it is a reflection of the rarity value of MFA bonds in that part of the curve. We were able to sell the 20-year issue to some large pension funds and insurance companies - as well as other investors - who have always wanted to purchase the MFA name in a longer maturity.

Kevin Martin (RBC): It was an excellent opportunity for MFA BC to extend out the curve and very encouraging to see the investor response to the 20 year maturity. Thanks, Peter. Heather, City of Toronto has been a regular issuer in the 20 year space. You don't have to comment specifically on the 20 year here, but perhaps you could comment on the City of Toronto's borrowing program in 2021 and looking beyond into what the city's borrowing plans are for 2022?

Heather Taylor (Toronto): Over the last few years we've had authority to finance up to a C\$1 billion dollars on an annual basis. We don't expect that is going to change, if anything, it may potentially increase. I think we've all commented on the need for capital investments. Covid has accelerated the need for certain priorities, whether that be affordable housing; whether that be some of our equity programs; or in Toronto, we have a heavy shelter presence; and a need for climate change preparedness. So it is about looking at our 10 year capital plan and trying to understand what needs to be accelerated to actually come out of Covid from a citizen need perspective, an equity perspective and also a recovery perspective. I will say confidently it will be a C\$1 billion. Would it be more? I think that's something that we're looking at right now. With regards to the borrowing terms, the city has chosen to do variations of 10, 20, and 30 years. On top of that, the social and the green issuance is strategically there to ensure that we've got a diversification on the rates, but it really is also driven by the type of assets that we need to have funded through the financing and the positive environmental and social outcomes we are trying to achieve. What we try to do internally is match the type of assets to the terms that we're funding. That really is the driver. We have a list of assets we look at, we break them out into the useful life and we do try to match the useful life to the amortization period and then that drives the values within each of the issuances of 10, 20 and 30 years. Every year, we will intentionally do a mix and obviously there's benefits from an interest rate perspective on that as well given the fact that municipalities have to fund the debt service charges, so it mitigates the exposure on the interest rate component, the repayment component, but it also helps us manage the pace of the replacement of those assets that we're financing.

Kevin Martin (RBC): Thank you Heather. Errico, it's a good chance to get the City of Montreal's perspective on this. Second, to MFABC, Montreal was just over at C\$1.3 billion issued in 2021. Can you comment on the City of Montreal borrowing program please?

Errico Cocchi (Montreal): The year was a pretty good one for Montreal from a financing perspective. Our last issuance was our biggest one since I can remember, and I've been at the city for a long time. The rates were attractive and we were actually very lucky with the last one where we issued, I think two days before the Fed came out, and rates started increasing. Regarding next year, as I mentioned before, with the elections and the new executive committee the budget is not finalized yet. We don't have those numbers, but it should be a similar amount to what we've been doing for the last few years, so in the range of \$1-1.5 billion.

We've been doing 20 years for a long time. Initially we were almost alone in that sector of the curve for municipals, and I recall some participants were not too excited on the 20 year term a long time ago. There wasn't too much demand there and it was kind of a strange part of the curve. But the 20 year maturity is still preferred by us for a few reasons. Similar to Toronto, the amortization of assets. You have to have the assets that can be amortized for longer than

that, and then other administrative issues regarding the province and other issuers in Quebec. There's been a few changes lately internally where we have some assets that will be amortized on a longer term now, we'll see how that evolves regarding issuance. We'll have to wait and see regarding that. The focus will still remain on 10s and 20s for shorter term. We have some serial bonds for refinancing purposes or smaller capital expenditures.

Kevin Martin (RBC): Thank you. Patrice, we're used to seeing City of Vancouver on an annual basis typically in the fall and this year, there was no exception. Curious to get your thoughts on the borrowing plans for City of Vancouver going forward.

Patrice Impey (Vancouver): Our borrowing is primarily for renewal of our assets which is quite predictable. New assets are often funded through development contributions or other in-year revenues. As with most cities we have a lot of our current assets that need renewal and in fact, our renewal rate is probably not where it needs to be. We need to be doing a better job of our renewals, trying to fill that infrastructure gap as the city grows and adds more assets. It's a fairly stable plan that we have around renewal. It is a multi-year plan, and we expect we will continue to do a C\$100 million issuance every year and that may grow as the renewal plan grows. We're in the midst of working on our next capital plan. We'll have the 4 year plan out in mid-2022, and I expect we'll continue with that same similar amount every year.

Kevin Martin (RBC): Christine, we haven't seen TransLink issue yet in 2021. I guess you're waiting for the last 2 weeks of December here. Maybe we'll get something. No, I'm just kidding! Can you provide an update on what the borrowing program might look like into 2022 and 2023 for TransLink?

Christine Dacre (TransLink): Last year was a unique year. It really started in 2020 when we did go to the market twice. We had to refinance C\$250 million for our inaugural bond from 2010. That was our first issuance in 2020 and then in July, we issued C\$400 million. Without knowing what was happening with Covid at that time, believe it or not, we were talking about a second wave. Now we're well into the fourth wave, but at that time, just not knowing what was going to happen in the market and with Covid and everything, we actually over-borrowed in 2020. In 2021 we did have a slow down on our capital spend for lots of reasons. We felt that we didn't need to borrow this year and we have chosen to push it out into next year.

For 2022, we're forecasting about C\$1 billion in total capital spend, but a lot of that is funded through our senior governments as well as federal gas tax. We're estimating approximately C\$500-600 million in cash spend. So, that's likely what our borrowing program will be. When we look at the terms, typically they have been 10 year and 30 year, and we've done 40 year in the past as well. We're similar to everyone, we try to match the life of the asset that we're borrowing for, but we're not tied to that. We are very flexible. We do have short

term assets that we borrow for as well as very long term assets. We kind of look at a whole bunch of different factors and really looking at the C\$250 million bond we issued in 2020 was a 5 year. This was the first time we issued 5 year debt, why did we do that? Well, we do actually have some 5 year assets, but it had more to do with the market environment at the time (this was March 2020). We're very fortunate that we're flexible enough that if the markets really want 5 years, we don't want to push it and push for a 30 year. We could

fit the 5 year in. So we're very fortunate with that. We typically do like the longer term, so 30 year, or we've done a number of 10 years as well. It's a little bit of the asset life that we're borrowing for, plus, what is the demand out there?

Kevin Martin (RBC): Thank you, Christine. We look forward to seeing TransLink in the capital markets in 2022. With that, we are going to pass it over to Mansoor for the next segment.

ESG

Mansoor Khan (RBC): Thanks Kevin. In the current environment, it's almost impossible to have any discussion with issuers or investors without discussing the topic of ESG. I would like to start off by giving a little bit of context around how the market has evolved over the last year. It is expected that global sustainable bond issuance is going to surpass \$1 trillion for the first time this year. Looking at the Canadian market specifically, issuance reached ~C\$24 billion this year, which is a 70% increase from last year. Green bonds accounted for ~65% of the issuance. We had around 31 issuers access the GSS bond market in Canada this year of which 10 were inaugural issuers. To date we have had around 50 issuers access the market in Canada. Looking at the municipal sector specifically, there has been C\$575 million of issuance this year which is slightly higher than the issuance last year. There have been a number of interesting transactions which include City of Toronto's social bond, and City of Vancouver's inaugural sustainability bond. Other developments included City of Toronto publishing its first ESG performance report becoming the first Canadian public sector issuer to do so while MFABC also started reporting on the use proceeds for their bond issues. To kick start the discussions here, I will start by addressing the first question to Heather. The ESG performance report published by City of Toronto is the first by any Canadian public sector issuer. Can you please your perspective in terms of what was the motivation behind publishing the report and what you intend to achieve out of it?

Heather Taylor (Toronto): For City of Toronto, I thought it was important to lead in the sense of showing other public sector organizations that this is the right thing to do, and it is the way of the future and that it can be done. So, not leading for the sake of being the leader, but for the sake of trying to encourage, to nudge, to inspire other public sector organizations. We all know right now, there are no standards and so I think a lot of people are actually waiting for standards, waiting for the requirement to do it, and I really felt that the City had an opportunity. If you think about the municipal sector and the type of services we offer, we really did fit well under each of the 3 pillars and so it really was about setting a baseline, establishing the fact that we have these services, we've got these commitments, tie it together, integrate the narrative, and demonstrate to others it can be done. I don't think we have the luxury of time to make advancement

in these areas. So that really was the driver and I will admit I think my team was quite reluctant to do it because it was for 2020 and it was when Covid had surfaced. There were other priorities at the time, and what I kept saying is, all of these challenges – climate and social challenges, social was being elevated because of Covid, climate was taking a backseat because of Covid but they weren't going away. So I think the fact that we did it during the pandemic actually signaled our true commitment to making this happen. For me, that was the real driver, trying to get out there to inspire and demonstrate to other municipalities, other public sector organizations that may not be as large, may not be as sophisticated, but even elements or threads could be replicated. We tried to do it in a way that could be replicated. If you think of municipal operations, we fit really nice - we are those frontline services, we are that level of government who really is tackling social and equity issues. We're living it first-hand. So, I felt that it was a huge opportunity to demonstrate what we do and to say what we want to do and where we want to go. At the end of the day, when you start making those outward commitments you are also held accountable. Also, I think the ESG performance reporting framework is really important. There were no frameworks and KPIs specific to municipal government issuers really. So, we looked at a multitude of frameworks, standards, and methodologies such as SASB, UNSDGs, GRI etc as a reference based on their relevance and usability for the City of Toronto. There was a little bit of method to my madness too. I want to be held accountable. I want to set standards and KPIs in the absence of being told what they are so hopefully we can help influence policy along the way.

For City of Toronto, I thought it was important to lead in the sense of showing other public sector organizations that this is the right thing to do, and it is the way of the future and that it can be done.

Heather Taylor, City of Toronto

Mansoor Khan (RBC): I think the work done by the City on this report is commendable as we fully appreciate the amount of effort that would have gone into it. As a follow up to that, it might be helpful to highlight some of the notable ESG targets that the City has established going forward. Also can you please share how your sustainable debt program (Green and Social Bonds) fits in that strategy?

Heather Taylor (Toronto): Under the “E” (Environmental) category, one metric that everybody is very mindful about is GHG reductions. We’ve got a climate action plan, but again, I didn’t want that climate action plan to take a backseat – this way we got to elevate it. What are we truly trying to target? The city has declared a climate emergency. What are we doing? And so when we look at the greatest emissions, they are in buildings. So with our KPIs, we’ve now elevated the importance and we’ve made stakeholders aware. And stakeholders could be anyone from the risk side to the capital markets side to the investment side. We’re elevating the discussion and that is another benefit of issuing the report. In the KPIs we’re looking at GHG reductions to net zero, hopefully by 2040. Under the “S” (Social) category, we’ve got a “Housing Now” strategy on affordable housing which creates 40,000 units. So, again, a huge metric, lots to unfold within it, but it’s out there. And so a government can be held accountable to whether or not it has made progress. The governance aspect, we all know that governments are held to account in compliance, but there’s a nice way to integrate the governance aspect into what we’re doing from the sense of how are we going about it and the how becomes very important. And so I look at the social aspect of housing, I look at the equity aspect of just who the City of Toronto is and what our diversity population is and how we’re trying to elevate that diversity conversation. To tie it into the financing aspect, you mentioned that the sustainability financing is going to hit that that \$1 trillion dollar mark. When we talk about our debt program, we have a C\$1 billion issuance program. If we can actually go into the markets with a larger financing program, but focused on sustainability, then that’s going to actually motivate the decisions that we’re making in our capital plan. It is going to accelerate those decisions. So if we say there’s more money available in this sustainable financing arena, then we need to have the assets to match up with that. That becomes a very significant driver, and again that was one of the main areas of thinking behind this as well.

Mansoor Khan (RBC): Patrice, in your investor presentation you highlighted many ESG targets that the City is trying to achieve. Can you give us a bit of an overview in terms of what those targets are? This year we also saw Vancouver issue its inaugural sustainability bond. This was the first sustainable debt issue since your inaugural Green Bond in 2018. Can you share your thoughts on the motivation behind updating the framework and the reason for the long absence?

Patrice Impey (Vancouver): Thanks Mansoor. Let me start by saying that we also read the City of Toronto ESG report, which was excellent. We were first out of the gate with the Task Force on

Climate-Related Financial Disclosures (TCFD) reporting, followed by a number of other Canadian municipalities and we now have a Canadian network that are working together on that reporting. I think we are really leading the way in that area from a municipal perspective and Heather, I think you’re doing the same from an ESG perspective, because I know my team is very anxious to prepare some ESG reporting as well. I think municipalities are leading the way in so many of those areas.

We were first out of the gate with the Task Force on Climate-Related Financial Disclosures (TCFD) reporting, followed by a number of other Canadian municipalities and we now have a Canadian network that are working together on that reporting.

Patrice Impey, City of Vancouver in the ESG section

We did our 1st green bond in 2018 as you mentioned. That was early on and we learned a lot and it was quite successful. Then we did have to go into the market with a regular non-green bond for the next 2 years because, as I mentioned, we use our debt primarily to finance renewal. We do have a lot of assets that need to be renewed and need the debt funding, but don’t qualify specifically for the green. As Heather said, as a city, we are doing many things around the social side and so the sustainability bond framework we developed in 2020 is the same situation as Heather - the team really wanted to keep going and move it along to put that framework in place in 2020. That allowed us to broaden the assets that we can finance through the bond and expand the reporting so we can hopefully have more frequent sustainability bond issues because it will capture more of our capital plan. Similar to what Heather said, the organization is really seeing that and saying “how do I help make this capital program a green program, or a social program? How do I qualify?” Because there’s a lot of momentum around that as we look at our capital plan. And so when we do our capital plan, there’s the basic renewal condition, but we also use the equity lens and we use the climate lens and those are all parts of developing the capital plan, which are then the assets that we look to finance with our debt issuance. It’s been a big part as our green agenda and as our social agenda has grown, it fit in really well, so it was great that our team was able to shift and develop that framework.

We’ve got a pretty aggressive climate plan. You may be familiar with the Greenest City action plan – the one that Vancouver had for 10 years, which just ended. The new one is the Climate Emergency action plan with much more aggressive goals to reduce carbon GHG emissions by 50% by 2030 and then to be carbon neutral by 2050. It’s a very comprehensive program. There are 6 big moves across a number of different areas to get there and it’s tracked with all

the KPIs and other metrics. So it works out really well as far as the reporting on the green and sustainable bonds, because we've got all those KPIs in place. We've also pivoted around our focus on social issues in the city. Housing and homelessness and mental health driven by the opioid crisis were central areas in that emergency. So that strategy is also being developed on the social side and that will feed into the next sustainability issue for Vancouver.

Mansoor Khan (RBC): Sticking to the theme of ESG targets. Christine, from your perspective, what would you say are the disclosed ESG targets that you'd be looking at? I understand TransLink has a well-established Green bond program, but from an industry targets perspective, anything that you can share?

Christine Dacre (TransLink): We currently have our targets at 80% reduction in GHG and 100% renewable energy by 2050 but we're working on revising these targets, and looking to net zero by 2050 and 45% GHG reduction by 2030. Our low carbon fleet strategy is really the catalyst to getting to that 45% by 2030. We will be publishing a climate action strategy at the beginning of 2022 and then further in the year, the full detailed climate action plan that will include the detailed climate change adaptation plan for our infrastructure and operations. We talked about earlier what's happening in our region: the fires, the floods. Resiliency and climate adaptation are beginning to be extremely important. We need to break it down and look at what we can do. So now's a great time to be continuing on with our strategy. As you may know, many of our busses and rolling stock are using zero emission technology. The sky train and the trolley bus fleets, and we're looking at the electric bus fleets as well. Those are our targets that we have set.

Mansoor Khan (RBC): Speaking about the bond program, TransLink's last Green Bond issue was back in 2019. Any plans of issuing Green bonds in the near future and anything you can specifically highlight as it relates to the Green spending that resulted in your recent absence from this market?

Christine Dacre (TransLink): Yes, so we over borrowed a little bit in 2020. What we do typically is when we look at what we need to borrow is we look at what our net spend is on our projects. Whenever we can build up enough, we would rather wait and issue a larger size bond. Our investors have told us that liquidity is important. The size of our bond issues is important. So, we feel that we should hold off and wait until we have a more sizeable bond issuance. We also really like that look-back feature because then we can look back and build that size of bond, and we're not holding up that cash. The proceeds are not sitting there while we're spending the cash flow. So that's really important to us as well.

I believe without committing to what we're going to issue next year, it's looking pretty good that at least one of the issuances will be a green bond. We have taken a lot of questions about a sustainable bond, social bond and whether we are going to get into that market. We are going to look at our framework and look at what it means to

move to a sustainable bond issuance or a social bond framework. Equity, diversity and inclusion is an extremely significant initiative for our organization. Green just fits really well for our business right now. But when we go into a sustainable or social bond, the challenges we look at is really making sure that the tracking and the verification of the benefits and outcomes of these projects will become increasingly important. So, I understand the social side of most municipalities, with the housing - we don't have that, but we do have significant impacts that we make to the communities and also in our projects around equity and diversity. We also need to increase the awareness and understanding of the criteria that we're using to identify and screen the projects. So we need to do our homework right now on the sustainable and social side and then look at what we could do to reframe or expand or build a framework that complements our green bond framework.

We talked about earlier what's happening in our region: the fires, the floods. Resiliency and climate adaptation are beginning to be extremely important.

Christine Dacre, TransLink

Mansoor Khan (RBC): Peter, this year, MFABC started to include use of proceeds mapped to UN sustainable development goals prior to each bond issue. What would you say was the motivation behind doing so? Also, MFABC has not issued a labelled bond to date, can you share what kind of challenges do you face in trying to do so?

Peter Urbanc (MFABC): Thanks Mansoor for the question. First, I want to mention that labeled bonds have been extremely helpful as a messaging platform for governments, but more importantly, for leading the development of useful frameworks and data - one of the driving forces around the development of this ESG data standardization, which I think, is the most important aspect of furthering the usefulness of sustainable finance.

On the other hand, we'd be remiss to not recognize that some labeled bonds, together with a whole plethora of ESG investment products, are being criticized, and for good reason, as greenwashing. The criticism doesn't just come from activists, I see it coming from investors themselves, - who, let's not forget, are the people for whom we are creating this data.

Operating in a sustainable fashion, doing all they can to help mitigate climate change these are things that are part of local governments DNA all across Canada. Politicians all across BC representing the largest to the smallest local government organization are being asked by their citizens to do things better and more sustainably and this is a reason why Heather mentioned that we need to be leaders around this - I completely agree.

Putting that aside, there are real structural reasons why MFA cannot currently issue a labeled bond with KPI reporting. I talked about our model where we issue a large bond issue but then we on-lend too many different projects and Members ranging from Metro Vancouver, who's our biggest borrower, to a town of 1000 residents. Part of that same bond issue can go to small local governments managed by a tiny staff complement who simply cannot currently report back to us in a standardized fashion.

We've been struggling with this at MFA because we know that our Members highly value sustainability, but most struggle with reporting on a standardized basis. Many investors I have spoken to currently not even really using the KPIs right now as they don't themselves have the capacity yet to decipher non-standardized data. We all agree that we need to standardize KPIs and investors should begin to incorporate them in their analysis. But at the end of the day many investors investor told us to focus on "use of proceeds" disclosures and trying to be as transparent as we can be around that aspect of issuance.

So last year, we started to disclose and map our proceeds to not just United Nations Sustainable Development Goals (UNSDG) but to green and social bond areas. Many investors told us, "This is fantastic, this is great. You're now telling us where the money's going, and in fact, we can include you in some of our sustainability portfolios now". We are not being included in all the specialty portfolios, some investors are using KPIs or must buy a labeled bond product, but they are a minority in the Canadian dollar market as far as I can tell. 100% of the proceeds we borrow can be mapped to UNSDGs and, in fact, most can also be labeled to green and social bond metrics.

Starting next year, we will disclose upfront on a loan-by-loan basis, not in aggregate form, where our bond proceeds will be spent from a green, social and UN-SDG perspective.

Peter Urbanc, MFA BC

We have an advantage at MFA in that we can disclose with certainty before every bond issue exactly where the proceeds will go. This is due to our legal construct, where, by legislation, we can only lend if a bylaw has been created and a host of other conditions are met. In fact, if we lend to do say an upgrade to city hall or to build a new fire station, and a bylaw has been created to lend towards that purpose, the entity has to spend the money towards that. If they can't spend the money they have to return the money back to the MFA.

Based on our "use of proceeds" process and our legislation, Bloomberg tagged our 2021 bonds as sustainability bond product - which is exactly what MFA was hopeful most investors would

recognize even though our bonds are not "labelled" by a third party. MFA does not want to compartmentalize our issuance between bond types as we have a small issuance program and it impacts liquidity. We want to keep issuing one flavor of MFA bonds and we believe that ALL MFA bonds are sustainability bonds - as we can only legally lend for approved municipal infrastructure and all of our proceeds are mappable to Green and Social bond use of proceed categories. Bloomberg mentioned to us that MFA was a similar construct to many US utilities, other entities that don't issue third party "labelled bonds" but, because they disclose where all proceeds go they have been tagged as sustainability bonds. So now on Bloomberg, every single one of our bonds going forward will be tagged as sustainability bond, but we want to go a step forward. We're going to continue to disclose in a more granular fashion.

Starting next year, we will disclose upfront on a loan-by-loan basis, not in aggregate form, where our bond proceeds will be spent from a green, social and UN-SDG perspective. We will be following ICMA principles in mapping each individual loan in a completely transparent fashion. As opposed to a broad categorization that we did in 2020 and 2021, investors will be able to judge for themselves whether they agree with the loan "use of proceeds" categorization. We are responding to investor feedback that labeled bond products such as "green" for example are not standardized and in many cases still require that investors spend considerable time understanding the issuer-specific choices of the categorization. Now labelled bonds do ensure that a third party confirms certain broad principles are followed - but the issuer still chooses how to categorize eligible projects and so investors often need to take the time to do the due diligence to understand the framework. We will be providing exactly what many investors have urged us to focus on which was much granular data as possible on the use of proceeds. Of course labelled bonds also do provide the benefit of KPI disclosures, but as I mentioned, few Canadian dollar bond investors I have spoken to are focusing on analyzing Key Performance Indicators (KPIs) currently - they are waiting for standardization to improve.

In fact, I would urge all my colleagues here to hear me out on this point. I think that governments can and should play a leadership role in helping standardize KPIs. Patrice and I have had many discussions about this. MFA is going to partner with both City of Vancouver and Metro Vancouver to help smaller local governments in British Columbia disclose KPIs - many have or can collect some of this data. But for some it is a big undertaking. As I said, they just don't have the staff capacity to do this while large entities like a Vancouver, Toronto or Metro Vancouver have the staff and the capacity to help standardize and can play an instrumental role in helping roll out that standardization throughout the local government construct in BC. Once data standardization meets a certain threshold, and it may well be within the next 5 years or so, I believe that the need for labelled bond product for governmental issuers will completely disappear - and for the better of all I would say, as it will allow the market to transparently make better collective decisions without then need to rely on any third party opinions.

I would say that a big number of governments bond issuers, even today, that are willing to spend a little time disclosing “use of proceeds” information will be considered in many SRI portfolios. Certainly some governments are more sustainable than others, but the bonds they issue is taxpayer money raised to provide valuable societal services, and citizens want their governments to do the right thing. There are few incentives for governments to be greenwashing.

Mansoor Khan (RBC): Thanks Peter. It will be interesting to see where this goes because obviously there has been an enormous amount of discussion over the years on standardization when it comes to reporting. It is also pretty clear that some issuers specifically in the U.S. have taken different approaches to issue sustainable debt. The market continues to evolve, and it will be interesting to see where we end up in 5-10 years. Moving to Errico, I'm sure this is a question that has been asked numerous times in the past but I will ask it anyways. City of Montreal has not issued sustainable debt so far, is that something that the City is contemplating in the near future?

It's something we discuss often but one of the hurdles for us is the background administrative issues that are quite complicated. We're actually trying to figure out ways to make it simpler in order to issue these types of bonds, but every dollar we issue is linked to a specific project via the bylaws of the city.

Errico Cocchi, City of Montreal

Errico Cocchi (Montreal): It's something we discuss often but one of the hurdles for us is the background administrative issues that are quite complicated. We're actually trying to figure out ways to make it simpler in order to issue these types of bonds, but every dollar we issue is linked to a specific project via the bylaws of the city. For any specific issuance, we could have up to 300 or 400 lines of projects that go to a specific bond. It's a very heavy administrative task to go through all of this to determine green, sustainable, etc, pooling all of these projects together and then doing the reporting and the follow up after the issuance. So for us, it's quite a time consuming process and we don't have the sufficient resources. Recently, we've had discussions to simplify some of the administrative process I just talked about. For example, working on decreasing those number of total project lines. But, I get a sense that if we could decrease those types of administrative obstacles it could make it easier for us to do everything up to the issuing of an ESG bond. But there are also ongoing challenges of monitoring and reporting on these ESG proceeds after the issue. We're not trying to be the black sheep of municipalities or anything, because the projects are similar to

every other municipality. We finance for the same things more or less. It's just a question of having the right structure for us to be able to do it in an efficient manner. I don't think that the City wants to hire 10 people just to find a project and then do the reporting. But then again, we'll see how things evolve but it's something we're considering, we're looking at it. I like Peter's way of looking at it as well. So, we'll discuss.

Mansoor Khan (RBC): Well, we hope you can get into this market soon and obviously we look forward to your inaugural transaction! Heather, I wanted to chat a little bit about Social bonds. Last year, the City priced its inaugural Social bond which was the first one done by any public sector issuer in Canada. Any color you can share around unique challenges as it relates to KPIs or other aspects of impact reporting on Social bonds?

Heather Taylor (Toronto): For the City's Social bond program, our Framework was developed in accordance with the International Capital Market Association's (ICMA) Social Bond Principles and received positive second party opinion from Sustainalytics, a leading ESG second-party opinion provider. Even though there is currently a lack of standardization in KPIs for social bonds, when you look at the projects that we financed, they were very specific shelter projects and the KPIs along with it are very easy to extract. I think the problem and the challenge will be to everybody's point as this evolves, and as this matures, we get into different elements of social type projects, it is going to become more complex. It's easy right now because our capital projects that we finance are very targeted and KPIs are easily identified. So, that's not a challenge, what it is, is trying to stay ahead of it and trying to anticipate the types of projects that we're going to have and the relevant KPIs. As we are in a planning cycle right now, and as we look at our 10 year capital plan, the motivation is to try and push as many projects as we can to have that social and environmental lens. Meanwhile, trying to come up with how are we measuring that progress? We've created a framework internally. That really is navigated now by what we know. But speaking to the standards; So, I was part of the International Sustainability Standards Board (ISSB) pitch to bring it to Canada, it's gone to Montreal. But we were part of the overall pitch for it to be to Canada. They've committed to having standards out by the spring. Those standards are going to actually help inform and shape what the KPIs could look like. I think from a KPI perspective, I love what Peter said. If we could actually standardize and just come up with an agreement across public sector organizations on how we want to tackle this, I think we would give the investor market a lot of confidence. I think this is one of the things I'm driving even at the National Board I sit on, the public sector accountability board (PSAB). This is going beyond the realm of accounting. This is actually going into more of a prospective type environment, which as an accountant, we're not overly comfortable doing. So I think it's about shifting people's mindset and thinking more forward, rather than retrospective and now I'm not answering specifically your KPIs. I can speak to how we're doing it today but I'm just trying to give you some insight as to what I'm thinking and the kind of conversations

I'm having because this is about shifting our mindset. The investors don't care about what you've accomplished. It's about what you're going to accomplish. They just need to check that you did accomplish it. So, it's about how do we come up with these metrics that speak about this forward thinking. That's a complete shift from reporting, because we always look at it in hindsight. I think the hindsight is going to speak to your credibility, but the forward thinking of what we're trying to target is going to speak to where we're going and what we're trying to achieve, and it really comes down to these outcomes. I could speak for hours on that specific point, but we were very targeted on our inaugural social bond, and the KPI's were very easy to identify based on what we financed. So, we developed our social bond framework by aligning ICMA Social Bond principles, which is the industry best practices, with the City of Toronto's overarching forward-thinking plans and strategies. But we still need KPIs for different categories of eligible project to be standardized based on inputs from industry experts, investors and issuers. Also, we need more focus to be placed on forward-thinking targets in addition to looking at accomplishments from the past. Keep your fingers crossed, there are going to be standards in 2022.

Mansoor Khan (RBC): Patrice, given the fact that you just issued your inaugural Sustainability bond, is there any color you can share in terms of the social aspect of the projects you have funded and perhaps from a reporting perspective, do you anticipate any challenges?

Patrice Impey (Vancouver): We follow very much the same process at City of Vancouver. We identify all of our projects as we're putting them into the capital plan. We have metrics and KPIs. In building the sustainability framework, we certainly took into account the reporting that was required. We wanted to do it because it made sense, but not if it's going to create a lot of extra work for the organization and so that was part of the decision, that we would go ahead with the sustainability framework that gave us that opportunity but was also very doable. I think we're pretty comfortable that we can meet the reporting requirements just based on the metrics that we already have in the organization. One of the examples that we did have, for instance, on the social side was a fire hall replacement and that was really around safety and it was upgrading it to seismic resilience as well. So that factored into the community side of things. That's one example of what we had where we have the metrics in place for a building, as well as community aspects.

Mansoor Khan (RBC): We heard earlier from Heather about the importance and role of ESG in an organization. The expectation is that if we push it hard enough, then the program volumes go higher and you would expect a larger portion of your regular borrowing program associated with ESG assets. Christine, from TransLink's perspective, what do you see as a big catalyst that can potentially result in incremental increase in green projects?

Christine Dacre (TransLink): Thanks Mansoor. I would say the development of the technology, and I mentioned earlier, about the

battery electric and the infrastructure that's needed. What we really need is development of more zero emissions fleet technologies that have minimal capital infrastructure requirements, but have the same current range as diesel buses. Development of the ability to deploy charging infrastructure quicker, maybe taking 1 to 2 years, rather than 5 to 6 years to fully redevelop a transit center. We have our plans, where we want to go, but to get there faster is on the technology side. I mentioned that earlier as well, that we want to keep our options open for other zero emission technologies that might come around. I'm going to come to this group when I want to look at my sustainability framework and how to tie that in. I think these conversations are extremely valuable to learn from each other. As people have said, to help set those standards because when we issued our first green bond, it was really difficult. We wanted to have a really good impact report but with no standards, it was difficult as to what we were going to report. So, moving into something like sustainability or social bonds, which we haven't delved into really, having those examples of what those frameworks look like and what those KPIs might be will be really helpful to us. And I really like Heather's point about the metrics should be forward looking. I agree with that and looking at what our program is: What are we here for? What is TransLink here for? We are here to make the region a better place in all aspects. So we need to think beyond a specific project. I hear in people's passion about climate adaptation and resiliency and the social side of it, that's the exciting part, but we have a lot of work to do. I really appreciate hearing from the other panelists and I think I can learn a lot from them as we move forward on those types of bonds.

Mansoor Khan (RBC): Peter, as these ESG discussions have escalated over the last few years, what other changes have you noticed in terms of requests from your clients (municipalities)? Any notable changes as it relates to trying to learn more about ESG, investing requirements?

Looking at the municipal sector specifically, there has been C\$575 million of issuance this year which is slightly higher than the issuance last year. There have been a number of interesting transactions which include City of Toronto's social bond, and City of Vancouver's inaugural sustainability bond.

Mansoor Khan, RBC

Peter Urbanc (MFABC): Most local governments are motivated to report on ESG-related data but they don't currently have the capacity to do so. Patrice and I have spoken about what efforts we can partner on to help standardization in the system - Vancouver has spent a lot of effort around this and we will work with them to leverage that effort for the benefit of the entire system.

That's one aspect – reporting. We've seen the biggest shift on the investment side. There is a growing interest for local governments to be socially responsible investors. Here again, I'll point to the City of Vancouver invests in our pooled funds and helped MFA design our fossil-fuel-free bond fund. MFA's trustees, who represent a broad cross-section of local government leaders, are unanimously supportive of MFA offering ESG investing options for interested Members whenever possible. As a result, all of our externally-managed pooled fund offerings must be managed by UN PRI signatories. That means that they are incorporating ESG analysis into the investment process.

Now, some local governments have gone a step further and have expressed a strong desire to shift their investments into strategies that help signal the importance of being green and address climate change. A small but growing number of municipalities in BC have made it a policy to focus on investments that are fossil fuel free in nature. There's a definition around FFF that we've adopted for several of our funds, and use as an exclusionary screen. We introduced a short-term bond fund a few years ago that screens out about 4% to 5% of the entities FTSE Short Term Bond Index - those would be the producers and transporters of oil, coal and natural gas as well as petrochemical companies that are in that index. That exclusionary screen definition is being used by a growing number of local governments and being incorporated into their policies. They are signaling that climate change is a pressing issue. We understand that many investors often don't like exclusionary investing, but for some of BC's local governments, it makes sense






because it's something their citizens want and it is relatively easier than incorporating a detailed socially responsible strategy along the entire spectrum of ESG themes.

We've had several funds that are fossil fuel free and our latest fund, which we will introduce in January, is "carbon light" fund. The new fund is a global multi-asset class fund that will be used by local governments in BC to invest in long-term reserves - so this will be invested in global equities, global bonds and alternatives. This is similar to what the City of Toronto has done a few years ago, with a new prudent investor regime introduced by Ontario. They have segregated their reserves into short term and long term, and investing the long-term portion with third party asset managers in multiple asset classes. This is that same idea. We're creating more of a growth-oriented fund for local governments that will be a carbon light fund. Out of the 8 to 10 strategies that will make up this fund, almost half of them will employ a strict fossil fuel free screen such that this fund will have a lighter carbon footprint than the underlying benchmarks.

Mansoor Khan (RBC): Perfect, thanks a lot for that! I would like to thank you all for joining us today and I believe that's all the time we have today!

Kevin Martin (RBC): Thank you everyone for participating in today's discussion, we appreciate your insight into these key themes for the Canadian municipal sector. We look forward to checking in with you again in 2022!

SELECT CANADIAN MUNICIPAL ISSUERS

	 Montréal	 MFABC	 TORONTO	 TRANS LINK	 CITY OF VANCOUVER
	MONTREAL	MFABC	TORONTO	TRANSLINK	VANCOUVER
RATINGS	A(H) / Aa2 / AA-	Aaa / AAA	Aa1 / AA	Aa2 / AA	Aaa / AAA
TYPICAL ANNUAL BORROWING REQ. (C\$ MM)	850-1,500	950-2,000	900-1,000	200-650	85-100
2021 DEBENTURE FUNDING	~C\$1.3 billion	~C\$2 billion	C\$1 billion	n/a	C\$100 million
EXPECTED 2022 DEBT FUNDING	C\$1.5 billion	C\$1.325-1.725 billion	C\$950 million	C\$300 million	C\$100 million
TYPICAL # ANNUAL ISSUES	4-5	2-3	3-4	1-2	1-2
TYPICAL MATURITIES	10-year 20-year	5-year 10-year	10-year 20-year 30-year	5-year 10-year 30-year	10-year
PUBLIC DEBT OUTSTANDING (C\$MM)	10,372	9,142	8,472	2,980	985
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 	<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
REVENUE SOURCE	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) (43%), Fed/ Provincial Transfers (34%), Transit (5%), User Fees (5%) ⁽³⁾	Taxes (46%), Fed/ Provincial Transfers (28%), Transit (21%), Investment Income (2%) ⁽⁵⁾	Property Taxes (57%), Utility Fees (21%), Licence & Development Fees (5%), Parking (4%), Grants (4%), Fees (4%) ⁽⁶⁾
OPERATING BUDGET	C\$6.46 billion ⁽¹⁾	~C\$398 million ⁽²⁾	C\$14.02 billion ⁽⁴⁾	~C\$1.9 billion ⁽⁵⁾	C\$1,735 million ⁽⁶⁾
CAPITAL EXPENDITURES	C\$19.54 billion 10-year capital program ⁽¹⁾	n/a	C\$44.7 billion 10-year capital budget and plan ⁽⁴⁾	C\$647.9 million ⁽⁵⁾	C\$683 million ⁽⁶⁾
EST. POPULATION⁽⁷⁾	1.7 million	n/a	2.8 million	n/a	1.1 million
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	Strong local economy with access to a growing and broad tax base which has consistently translated into strong operating results

(1) Montreal Budget 2022 (2) MFABC Annual Report 2020 (page 44) (3) Toronto Operating Budget Report 2021 (page 42) (4) Toronto Operating Budget Report 2021 (page 6) (5) Translink 2021 Business Plan (page 16, 39, 61) (6) City of Vancouver Draft Budget 2022 (page A-1, A-10, A-20) (7) Statistics Canada Census Profile, 2016; 2021 Census will be released on February 9, 2022

SELECT RBC-LED TRANSACTIONS IN 2021

Select Transactions
for Canadian
Government Issuers
& Asset Managers

 <p>€160,000,000 0.70% Senior Notes due 2041</p> <p>A(H)/Aa2/A+</p> <p>Sole Lead November 2021</p>	 <p>£500,000,000 1.125% Senior Notes due 2026</p> <p>AAA/Aa1/AA+</p> <p>Joint Bookrunner October 2021</p>	 <p>US\$1,000,000,000 1.50% New 7-year Benchmark due 2028</p> <p>A(H)/Aa2/A+</p> <p>Joint Bookrunner October 2021</p>	 <p>C\$1,250,000,000 1.50% 5-year Benchmark due 2026</p> <p>AAA/Aaa/AAA</p> <p>Joint Lead October 2021</p>
 <p>US\$2,500,000,000 0.90% Senior Notes due 2026</p> <p>AA(H)/Aaa/AA+</p> <p>Joint Bookrunner July 2021</p>	 <p>C\$750,000,000 0.90% Senior Notes due 2026</p> <p>AAA/Aaa/AAA</p> <p>Joint Bookrunner July 2021</p>	 <p>C\$800,000,000 1.55% 10-year Re-opening due 2031</p> <p>AA(H)/Aaa/AAA</p> <p>Lead June 2021</p>	 <p>C\$5,000,000,000 1.25% 5-year CMB Re-opening due 2026</p> <p>AAA/Aaa/AAA</p> <p>Lead June 2021</p>
 <p>US\$1,000,000,000 1.00% Senior Notes due 2026</p> <p>AAA/Aaa/AAA</p> <p>Joint Bookrunner June 2021</p>	 <p>C\$975,000,000 C\$475mm due 2026 C\$500mm Re-opening due 2031</p> <p>AAA/Aaa/AAA</p> <p>Joint Lead May 2021</p>	 <p>US\$1,000,000,000 1.90% New 10-year Benchmark due 2031</p> <p>AA(L)/Aa2/AA-</p> <p>Joint Bookrunner April 2021</p>	 <p>£1,750,000,000 0.25% Senior Notes due 2026</p> <p>AA(L)/Aa3/A+</p> <p>Joint Bookrunner January 2021</p>

SELECT RBC-LED TRANSACTIONS IN 2021

Green Bonds and Sustainable Finance

 <p>C\$100,000,000 C\$150,000,000 1.60% Social Bond due 2030 2.20% Green Bond due 2031 AA/Aa1/AA Joint Lead / Lead December 2021</p>	 <p>C\$2,750,000,000 1.55% Green Bond due 2029 AA(L)/Aa3/A+ Joint Bookrunner July 2021</p>	 <p>A\$750,000,000 1.50% Green Bond due 2028 AAA/Aaa Joint Bookrunner June 2021</p>	 <p>C\$500,000,000 2.10% Green Bond due 2031 AA-/Aa2/AA- Lead May 2021</p>
---	--	---	--

Maple Offerings

 <p>C\$500,000,000 1.00% Green Bond due 2024 -/Aaa/AAA Joint Bookrunner October 2021</p>	 <p>C\$600,000,000 1.20% Sustainability Bond due 2026 AAA/Aaa/AAA Joint Bookrunner July 2021</p>	 <p>C\$1,250,000,000 C\$750,000,000 C\$350,000,000 0.75% Green Bond due 2026 & 1.50% Social Bond due 2028 (New Issue & Re-Opening) AAA/Aaa/AAA Joint Bookrunner February, April, July 2021</p>	 <p>C\$600,000,000 1.90% Green Bond due 2025 AAA/Aaa/AAA Joint Bookrunner June 2021</p>
 <p>C\$750,000,000 1.00% Sustainability Bond due 2026 AA(H)/Aaa/AA+ Joint Bookrunner June 2021</p>	 <p>C\$1,000,000,000 0.75% Green Bond due 2026 AAA/Aaa/AAA Joint Bookrunner February 2021</p>		

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 2022. All rights reserved. XP_Multipage_12.21