Capital
Markets

2020 Municipal Treasurers Roundtable

JANUARY 2021

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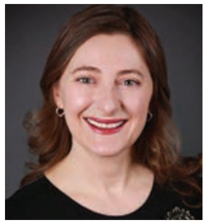

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Director, RBC Government Finance

MUNICIPAL TREASURERS KEY THEMES

1

Prudent Fiscal Management

The majority of Canadian municipalities were very quick to recognize the fiscal risks of the covid-19 pandemic. Municipal governments moved quickly to institute cost-cutting measures such as hiring freezes, lay-offs, re-allocating resources, and scaling back some program offerings. Strong reserve positions served as another shock absorber for operational shortfalls across many municipalities.

2

Revenues

Property tax represents the largest revenue item for most Canadian municipalities and a large share of these jurisdictions are reporting a stable property tax base and steady collections throughout 2020. Larger municipalities with transit systems were exposed to more significant revenue short-falls as fare box receipts dropped materially. User fees such as parking taxes, fuel taxes, and land transfer taxes were also negatively impacted in 2020.

3

Transit

Jurisdictions that feature large transit systems reported a significant drop in ridership levels during the first wave of the pandemic. Ridership levels recovered somewhat during the summer months but physical distance restrictions have reduced the capacity of service and there are extra costs involved in keeping transit workers and transit users safe in the system. Looking forward, the unknown speed of recovery for ridership levels will create a budgeting issue that is likely to require continued support from the provincial and federal levels of government.

4

Expected Borrowing Requirements for 2021

The majority of Canadian municipalities plan their capital expenditures and related borrowing requirements over a rolling multiyear (10-year being the most common) planning period. This long planning period provides stability and a reliable timeline for municipalities to execute their capital plans. By the conservative nature of its design, this capital planning system does not typically result in any surprising swings in the year-to-year borrowing requirements for municipalities.

5

Support from Senior Levels of Government

The Canadian government and each of the provinces provided pandemic-related funding assistance to the municipal sector in 2020. The majority of the municipal funding relief in 2020 has come through the federal “Safe Restart Agreement” which provides provinces and municipalities with formula-based payments according to each municipality’s needs for assistance with social services, transit, and general municipal shortfalls. There is a broad recognition amongst municipalities that there will be a need for similar funding support from senior levels of government in 2021 as the fiscal challenges of the pandemic are likely to persist.

6

ESG Related Issuance

There is a growing movement in Canada, driven primarily by the municipalities, to broaden ESG bond issuance to include social and sustainable bonds in addition to the more traditional green bond issuance we have seen in the past from this sector. Many Canadian municipalities see the covid-19 crisis as an opportunity to address social and environmental inequities by sharpening their focus on ESG issuance. City of Toronto did their inaugural social bond issue in 2020, making Toronto the first Canadian public sector issuer to do a social bond. Many municipalities recognize the value of increasing the level of disclosure on their ESG eligible projects to improve accountability on delivering outcomes that better align the ESG goals of the issuer with the reporting requirements of the investors.

ECONOMIC LANDSCAPE, COVID-19 AND MARKET ACCESS

Kevin Martin, RBC: It is my pleasure to moderate this panel of very distinguished guests from the Canadian municipal sector today, where we will discuss the current economic landscape, budgetary effects brought on by covid-19, domestic borrowing trends, the 2021 outlook, and developments in environmental, social, and governance side of the municipal sector in Canada. Welcome everyone, thanks for joining us today. Simon, I would like to start with you please. The first topic is the general economic backdrop and the effect of covid-19 on local economies. What a year 2020 has been. We would appreciate your thoughts and to hear RBC's view on the Canadian economic performance thus far in 2020 and specifically how we've done through the covid-19 crisis.

Simon Deeley, RBC: Hi everybody, I will go through the economic backdrop of what we have seen in this very eventful 2020, as Kevin said. Obviously, a sharp contraction in the first half to the year, Q1 down 7.3% annualized and Q2 down about 38% annualized so we were hit hard and probably more than some of the other countries, especially the US. We received data yesterday for Q3 which showed a solid but actually lower than expected and incomplete bounce back, about 40% annualized or 9% quarter on quarter growth, which still leaves us a bit over 5% below the 2019 Q4 levels, so still a lot of ground to make up. The positives from the latest release shows a good increase in consumption and housing, indicating very strong household support for the economy on the domestic demand-side. Savings has continued to increase, so that does give us both a buffer for households should they face further financial hardship, as well as providing a potential boost for consumption down the road. Going forward in Q4, a lot of risks with the current virus spike and the associated restrictions, we're just above positive for current forecast, but that could very well be a negative print for the current quarter.

> We have seen a big move to single detached homes, suburban and outside of urban cores, and that's been consistent and getting more pronounced in recent months.
>
> *– Simon Deeley, RBC*

Housing is always a very important subject especially for municipals, re-sale housing activity dropped in March and April, as the lockdown measures came in to place and activity and supply was reduced and people actively searching for homes was reduced as well. Really sharp bounce back since then, and we are tracking in terms of yearly activity about 10% higher for 2020 versus 2019. So definitely more than making up for it. The big trend, I don't think will really be a surprise to any of you. We have seen a big move to single detached homes, suburban and outside of urban cores, and that's been consistent and getting more pronounced in recent months. Urban cores, especially condos, condo-apartments, have

HOME RESALES IN CANADA

Thousands units, seasonally adjusted and annualized

Source: CREA, RBC Economics

been under some pressure. Price gains just to give an example, national year over year price for singles, benchmark price is up 12.7% year over year, condos up just 5.7% year over year. Since March, condo prices are about flat. So, it's really a shift, not only an increase in overall housing, but really a shift towards singles outside of urban cores. That trend puts some pressure on prices in those markets, but also there's pressure on the other end with increased supply in those urban cores. On the retail sales front, there has been a solid recovery as we are above a year ago levels in terms of monthly sales and only about 3% below on a year to date basis versus last year. Again, I don't think there's a lot of surprises in the breakdown there. Those sectors that require close contact, including accommodations, arts, and culture have been lagging, and those that are easier, especially the goods side, those sales have done better. But overall, a pretty solid recovery on the retail sales side.

Monetary policy response, this was really concentrated in March and Q2 of this year, March itself saw three different 50 basis point cuts by the Bank of Canada, two of those at non-scheduled meetings and then a QE program that first started in April. That program was $5 billion per week until just recently, when they moved it down to $4 billion, while keeping the level of stimulus maintained. So essentially that means the risk weighted purchase amount was the same but the cash value has been reduced. A big part of their crisis response was on the market functioning side, so term repos, taking in collateral that was seeing liquidity issues, were huge factors. Over $200 billion in term repos were completed, some of those have since rolled off as we are at approximately $150 billion currently, but took in a lot of corporate securities, ABCP, and over 70% of the term repo collateral was on that side. So that was a huge factor as well as purchases of banker's acceptances early on, and we'll hopefully have the chance to discuss those programs a bit more later, but definitely a strong crisis response in market functioning by the Bank and we have seen a lot of improvements since then.

On the Fiscal side, it has been an unprecedented year as well. We've just had an update on Monday [November 30th, 2020], with the deficit for the current fiscal year estimated at $381.6 billion which is above the fiscal snapshot in July at $343 billion. Wouldn't really say they did a lot new in terms of specifics in the most recent update, an extension of the current program, the CERB which is now the CRB, wage subsidies, rental subsidies, some incremental changes on the revenue side, tax proposals on digital companies, and also on the housing side, an intention to do a foreign buyer's tax. Those are items to keep track of, but really in terms of the deficit numbers it is not really something that is going to be eliminated any time soon. On the deficit numbers, the government provided indication of where we are tracking for future fiscal years, and that would be from about $380 billion for this fiscal year, tracking closer to 120 billion for next fiscal year. One thing to note is that does not include some set aside spending which is $70-$100 billion over 3 fiscal years, as that was not allocated and wasn't included in the fiscal details. But, in terms of when they are moving on from the pandemic, it seems they are very focused on a recovery that will include green infrastructure, so in terms of Canadians returning to work, they would focus on the green infrastructure side as well as dealing with some of the inequities that have been more pronounced during the pandemic, such as women working. They have been disproportionally impacted as well as lower income individuals and minorities. Those are certainly priorities for the government going forward. Why don't I leave it there and see what others have to say.

Kevin Martin, RBC: Thanks Simon. On that point regarding the recent fiscal update from the Federal Government, they also updated the debt management strategy which might be relevant to the issuing municipalities around the table. Do you want to make any comments on the shift in borrowing that we are likely to see from the Federal Government over the next few months?

Simon Deeley, RBC: I must say also a bit surprised on the debt management strategy, as the government have been basically moving some of the short-term bond funding that they had outlined in the July DMS to T-bills which is the front-end of the curve. They haven't increased anything in 10s and 30s, other than the big increase in the July DMS to 10s and 30s, so still a disproportionately high amount of funding there, which is a sector where municipals and provincials tend to issue quite frequently. But in terms of the shift versus July, a big shift was to treasury bills, and so we believe for front-end bonds they're going to be tracking about where they were, and the same for long bonds, so 10s and 30s. We are expecting to see more Treasury bill issuances - from $15 billion last week and expected next week to about $25 billion every other week. They have moved short while kind of keeping the long-end about where we were tracking already.

Kevin Martin, RBC: Thanks Simon. Let's bring in the perspective of our municipal issuers here. Mehdi, if we could start with the City of Montreal, how would you characterize 2020 for Montreal on a fiscal basis, what were the biggest challenges this year and how is the City ending up? Are there any surprises in terms of what the City was expecting at the start of the pandemic in March?

Mehdi Alani, City of Montreal: On the fiscal side, we had our first lockdown on March 23rd. Right after we did two scenarios, one was optimistic, of $260 million shortfall, and one pessimistic of $540 million shortfall. This captures, mainly, lost revenues from property transfer taxes, parking, and fine revenues. It also covers some increasing costs such as additional contribution to the transit system and other covid-19 related expenses. After these two scenarios, the administration elaborated a cost cutting plan and sought contribution from the provincial government. The cost cutting effort resulted in $123 million of savings, and the provincial government aid was roughly $180 million this year. We recently announced the 2021 budget and of course the 2020 budget is a balanced budget, as required by law. To conclude, the impact was manageable overall because almost 80% of the city's revenues are tax revenues or government transfers and these are not impacted in economic downturns. In case of non-payment the city has first lien on the property, and we did not observe any unusual increase in non-payment within the collection of property taxes. You can say that the revenue stream is stable and immune to these kinds of shocks.

...almost 80% of the city's revenues are tax revenues or government transfers and these are not impacted in economic downturns.

– Mehdi Alani, City of Montreal

Kevin Martin, RBC: Mehdi, thank you very much. Heather can you give us a snapshot of how the City of Toronto is faring through 2020 thus far?

Heather Taylor, City of Toronto: Sure, I have to say that I chuckled at your question about the challenges since the list is pretty long, but similar to what Montreal did, I can try and simplify it. The City of Toronto announced our lockdown in March as well. We very quickly started doing some modelling around what that was going to look like. We came up with a set of assumptions, again, best and worst case scenarios, also dependent on how many waves we were going to experience in 2020, the public health measures, that type of thing. We had a shortfall in the range of $1.5 billion to $2.8 billion depending on how those assumptions unfolded. Next, we started tracking our actual expenses on a weekly basis against those assumptions. I will say that there was an unprecedented level of collaboration and cooperation amongst the greater Toronto and Hamilton area in the sense of sharing information, because this information became really, really important and quite powerful in sharing with other levels of government. It allowed us to explain what our situations were and how the surprises were really from the perspective of the magnitude of lost revenues.

The property tax base is relatively stable and collections have been stable, but over 80% of our pressure has been derived from lost revenue. The City of Toronto has a massive transit system, almost half of our lost revenues pertained to transit specifically. We also have a tax that is directly correlated to the real estate market. As Simon mentioned earlier, there was an impact on the real estate market. But overall, our experience so far reflects our lost revenues are being driven by the transit system as well as the municipal land transfer tax. Where will we be at the end of the year, are there any surprises? I'd say that, we had that lull in the covid-19 experience over the course of the summer and that allowed our transit ridership to rise to over 35%. That level dropped again recently to about 20%, so again we had a range of where we thought we would land.

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>
> *– Heather Taylor, City of Toronto*

The city itself introduced significant measures for cost containment. It included, unfortunately, lay-offs of staff, and we scaled back on programs that couldn't be delivered within the covid-19 realities. We found over $500 million in savings in hiring freezes, lay-offs, and programs being scaled back. Our overall shortfall is going to be $1.7 billion, before any support from other levels of government are applied. We are optimistic on receiving full support from other levels of government. But it's not over yet, covid-19 is hanging around for the remainder of 2020 and into 2021, so we still have a pressure for 2020 that we are working on with other levels of government to solve.

Kevin Martin, RBC: Thank you Heather, I can only imagine for all of you, that the pressures of budgeting for this upcoming year and the future years must be enormous. As you mentioned Heather, we're still in the middle of this pandemic so there are certainly many challenges involved in accurately forecasting revenues and expenses for the coming year. Peter, what have you observed in 2020 thus far with your municipal constituents in British Columbia?

Peter Urbanc, BCMFA: Thanks Kevin. As an infrastructure bank operating throughout BC, MFA has a bird's eye view of local governments across the entire province and, as one would expect, we saw a variety of different contexts and approaches to dealing with the pressures of covid-19 on budgets. Property taxes are the main source of revenue for local governments, but the make-up of other types of revenues can vary quite bit. In a medium-sized city like Victoria, for example, where MFA is headquartered, there are certain revenue sources such as parking, and tourism-related revenues, that have dried up and have an important budgetary impact. Those types of revenues are less important to, say, a small town of 5,000 people with a many retirees, where a bigger slice of revenues would be property taxes. But I'd say generally speaking, I think there was a quick realization in BC early on in the year, say in March and April, that local governments needed to tighten their belts to meet the budgetary challenges. There was a remarkably quick effort to work on cost containment, including, unfortunately, furloughs and lay-offs of non-essential staff. It is important to note that all local governments in Canada have strict balanced budget legislations in place. If you look at employment data in Canada, and in the States for that matter, local (and US state) governments start cutting back as early around Q2 of 2020 - as they had to legally do their best to try to balance their budgets even as revenues were starting to be negatively impacted. Typically, in Canada, if a local government cannot rectify a budget shortfall in any given year, they must include the shortfall in next year's budget and plan for balance in the following year.

Many of the same pressures that the City of Toronto or Montreal just spoke about apply to the larger municipalities in Metro Vancouver. There is an important difference in Metro Vancouver, and Christine is here from TransLink to talk to this, that local governments do not own the public transportation agency - it is a separate agency. But generally speaking, local governments in BC tightened their belts quickly, as I think they realized that higher levels of government were not going to help immediately. Similar to what was happening across Canada, some Mayors were making very public requests to get emergency funding from the Provincial and Federal governments – but that direct monetary help came late in BC and was lower than in other jurisdictions I would say. As the year progressed, the enormous support provided by the Federal government directly in the hands of individuals and small businesses' hands was likely an important factor in supporting very strong property tax collection, which combined with the belt tightening, meant that the lost ancillary revenues were mitigated.

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>
> *– Peter Urbanc, BCMFA*

We will have a clearer picture over the coming months, but in BC it seems like we are coming out of this crisis in good stead where the budget cutbacks have dealt appropriately with the pressures we faced. BC was lucky because our covid-19 "first wave" was less pronounced and relatively easier to handle than in some other jurisdictions. I mean covid-19 of course was not easy for anybody to deal with, but we were able to re-open a little quicker than some other jurisdictions. But now of course the second wave is hitting British Columbia quite hard, so it will be instructive to see what happens next year.

Kevin Martin, RBC: Thanks very much Peter. Christine, we've heard some of the challenges the City of Toronto is facing on the transit front. For TransLink, transit is your main business of course. Can you give us an overview of the tumultuous year 2020 has been for TransLink?

Christine Dacre, TransLink: Where we differ from other transit systems in other cities is that it wasn't just our ridership that was hit. We have a diverse set of revenue streams, which includes a fuel tax revenue. With the shift to working from home, especially at the beginning of the pandemic, our fuel tax revenue was hit hard. It's the uncertainty of what we were dealing with that was the biggest challenge. And like everyone else, we ran a lot of different scenarios. So our fuel tax revenue was hit, our fare revenue was hit really hard, as well as our parking tax. We get just under $100 million in parking tax revenue and our forecast to the end of the year for that was almost cut in half. Fortunately, we had significant reserves that we knew we could use to help weather quite a bit of the storm, but not knowing how long it would be was difficult. Also, we couldn't forecast the 'how long it's going to take to come back to whatever normal' looks like. We still don't know that. I think that was the biggest challenge at the beginning.

We did go in to a time where we were going to make significant service cuts and significant lay-offs. It was about June when we announced we were going to lay-off about 1,500 operators and cut our service as well. Well that was right at the time that the Provincial Government was entering in to their BC Restart Plan. Transit is very important for the economy and is an essential service -- a lot of essential services use the transit system -- hence our shutting down didn't mirror up with the Province's plan. We came to an agreement with the Province that they would cover us for the savings we would have made up from making those lay-offs and service cuts so we could keep our service on the road. And remember, our service on the road, 100% of our service isn't really 100% service because of the physical distancing restrictions. We only had 70% capacity on the buses and our SkyTrain vehicles as well, which was a further challenge. We were also trying to tap into all the emergency relief funding that was out there. But we didn't qualify for anything! And similar, I'm sure, to the municipalities, we tried everything! And so it was pretty stressful. We did the same things as the other people have commented on. Hiring freezes, we did the absolute necessary. Keeping the service on the street as it was our number one priority. Everything else went to the back burner. We looked at our capital programs to see what we could defer. We really looked at scaling back everything possible.

> We're ending the year well because of the emergency relief funding that we received [...] so in looking at our 2021 budget, we were able to know that we have a little bit of that relief funding to help offset some of the ridership losses.
>
> *– Christine Dacre, TransLink*

Fortunately, in September we got the emergency relief funding and that really took a load off and our fuel tax revenue looks like it's bounced back a lot better than what we thought. We're ending the year well because of the emergency relief funding that we received. It really takes us into 2021 as well, so in looking at our 2021 budget, we were able to know that we have a little bit of that relief funding to help offset some of the ridership losses. Someone was commenting, I think it was Heather, saying ridership was down to 10%, so our ridership boardings dropped down to 17% of pre-covid-19 levels, and right now it's at about 42% of our pre-covid-19 levels. And as we work on our budget for next year, we're predicting it might get up to, on average, we're predicting about 51%. Our biggest problem into the future is how long is it going to take to bounce back? So we really do have a systemic revenue funding issue moving forward. At least we are comfortable going in to 2021 -- we are fine -- and we have some time to do that refresh of the investment plan.

Kevin Martin, RBC: Thank you Christine. I would imagine one of the main issues for you in the lower mainland is that transit is usually the preferred option for getting around in non-pandemic times, given the challenges with not as many freeways or outlets for car traffic. Do you have any comments on the idea that if traffic patterns pick up enough around Metro Vancouver, that people will get fed up with sitting in traffic and may shift back towards transit.

Christine Dacre, TransLink: Yes Kevin, and you're absolutely right. I was driving the other day, and I don't drive often because I walk to work. And traffic was horrible! We are a city, region of cities where transportation is a priority for people. Our ridership is one of the few cities in North America that was with annual growth of five to six % over the last couple of years. Our system was getting full, we were doing expansions, so we were in a good place. You're right, with water on one side, mountains, and the US border on the two other sides, we don't really have a robust road infrastructure. We are an area that does pride itself on the transit system -- it is used a lot -- and I think you're right. Once we get to whatever the new short term normal is people when they go in their cars they'll think, well this isn't very good! So they'll come back, I do believe. Some of our scenarios are showing that maybe our ridership won't get up to pre-covid-19 levels for another 8-9 years even. But the good thing is with a vaccine on the horizon, maybe it'll come faster. And I think once people feel safer on the transit systems they will come back, I think they'll come back faster. I do believe that. There is a lot of talk about people working from home now and not going to the office anymore. I don't know how that's going to go. I mean I do miss seeing people in the office. But our system was full anyways, so I think that we can account for that, and we are going to get more population coming to our area so I'm an optimist, and I do believe the ridership will come back.

Kevin Martin, RBC: Thank you Christine. Laura, I know that transit is also a factor for York Region as well. Can you comment on the experiences and challenges thus far in 2020 and how the Region is working through them?

Laura Mirabella, Regional Municipality of York: For York Region, the reduction in transit revenue was also extremely material. We're a Regional Government so we don't have the local services that a single tier municipality like Toronto has. We have 9 local municipalities, and they have their own challenges and had to incorporate many lay-offs

> For the Region, it was really about the increased cost of responding to the public health crisis, because we have responsibility for public health, and the revenue reductions on the transit side.
>
> *– Laura Mirabella, Regional Municipality of York*

in order to manage their revenue reductions and additional costs for some of those local services that they provide. For the Region, it was really about the increased cost of responding to the public health crisis, because we have responsibility for public health, and the revenue reductions on the transit side. Our ridership went down to about 20% of pre-pandemic levels, but the revenue dropped to essentially nothing. As a result of having to keeping those physical distances, we put Plexiglas around all the drivers, we didn't allow people to load at the front of the bus, and our council made a conscious decision not to enforce fares. So people weren't walking up to the front and dropping off their fare in the box, and we did not enforce, so for several months we had almost zero transit revenue. Our ridership has come back to about 35-40% during Q3, when things were opening back up. We haven't seen it drop-off dramatically yet. York Region has been fortunate so far, we are not in another full lockdown, we are only in what they call a "red control level". We still have many of our businesses that continue to operate. We have inbound commuting from other regions coming to our industrial areas, most of those businesses continue to not only operate but to operate on-site as opposed to working from home. There still is traffic on the roads, although not as much congestion.

Overall, we had anticipated about $175 million impact for 2020, which is about 7% of our gross operating revenues which is significant. We have managed that mostly by being able to stop some non-essential activities, or non-urgent activities, and re-allocate resources from within. At one point we had almost 700 staff re-allocated to the public health efforts. That saved us from having to go out and hire all those public health nurses and people to help run that response, contact tracing, and case management. And so, as a consequence of that, and with the late understanding that the province is going to come to the table with some relief funding, safe restart funding, we do believe that we are going to have managed most of that impact, so we are not anticipating ending up with a year-end shortfall, but it was pretty touch and go there for a while. At our mid-year, we were expecting to have a deficit of around $20 million, which would be about 2% of our net expenditures, but we now believe we will probably end the year even.

Kevin Martin, RBC: Thank you Laura. York Region has been a beneficiary over the recent years of increased immigration inflow into Canada. We would be interested in your thoughts in terms of what the trends in immigration have looked like in 2020 and what the Region is expecting over for the next 1 or 2 years?

Laura Mirabella, Regional Municipality of York: We've had to reduce our near-term forecasts because it is a factor. We don't think that immigration is done for good, but certainly there was a slow-down in 2020 and probably will have an impact for the next couple of years. We've had to revise our development charge forecast down about $150 million, we had a really strong January and February, but then it really just dried up. We started to see housing pick up again late in the 2nd quarter, with the province declared housing construction to be an essential service and was allowing housing construction to proceed 24h a day in order to be able to enforce the physical distancing that would be required on those job-sites. That allowed it to pick back up and we saw that our building permits started to increase. We think that we are going to be on target to get about $240 million or so in development charges this year. So we're down about a third, but it is continuing, and is better than what we had originally anticipated. We are also a beneficiary from this move towards the suburbs. While we have some centers and corridors with high density, we also have a lot of suburban areas and we're seeing both resales and housing starts at pretty high levels in those sectors.

Kevin Martin, RBC: That's a very good point. I think there's a big shift from homeowners towards backyards and just more space, which should benefit York Region and other suburban areas going forward. Derek, certainly Newfoundland & Labrador, and the rest of Atlantic Canada, has had tremendous success keeping covid-19 numbers contained until recently with the Atlantic bubble, can you comment on how the City of St. John's has done thus far in 2020?

Derek Coffey, City of St. John's: To say it has been a challenging year like the rest of the colleagues here would be an understatement. We actually started in the third week of January, with a week-long state of emergency declared due to an 80cm blizzard. So in that 3 week clean-up from that one blizzard, we spent 40% of our entire years' snow clearing budget right there and then. So we felt we had gotten through that, and of course when the pandemic hit that threw us a massive loop for budgetary purposes. Laura just commented on 7% overall for the year, I think that's where we're looking as well. To some surprise, residential tax payments have held very well. They are almost tracking identical in line with last year despite the fact that we have waived interest on all outstanding taxes for 2020. The commercial tax payer however, has certainly taken far more advantage of what is a deferral. Looking at what's to come there, we won't know until the early part of January or February, once the interest switch is flicked back on. We won't know the true impact on the commercial sector, for a few more months. We are hearing different stories from different parties. We've also been hit by the fact that in many cases some companies have left the city and a large part of that is due to the oil industry.

So I guess this year it started with the oil price war between Russia and Saudi Arabia, moved on to "Snowmaggedon", and then a pandemic hit, so we have a number of factors hitting us right now. Recreation, parking revenues, all that has plummeted this year. One thing that is a bright spot that did hold out was construction and permit revenues, a large part of that is attributable to the fact that back in June, the provincial government announced a residential rebate program for upgrades to your home. The uptake on that program was way beyond what anyone expected so we were issuing permits left right and center, as everyone was in essence taking advantage of 25% off for upgrades or enhancements. As you just mentioned Kevin, about backyards, we saw a lot of work and money being invested there.

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>
> *– Derek Coffee, City of St. John's*

Transit was a very interesting story for us, like many of my colleagues here, as it is not always seen as a first choice here in this city. We are a very car-centric city, probably because you can get from anywhere to anywhere in 20 minutes at the absolute highest, and that is probably within a 40km radius, if not even a bit more. Sometimes some of us come in to work and say "I got caught in traffic this morning, it took me 25 minutes to get to work!", which I know is a joke to many here. We don't have an immense amount of integration in our public and para transit system yet. The public transit system, your typical buses, is probably around 65-67% publicly funded. We did see a plummet in revenues there, which increased the subsidy required. Our para-transit system is about 90% subsidized, and the plummeting ridership there actually saved us money, so when you put the two systems together as a whole, we were actually ahead of budget on public transit to the tune of about 5% overall for the year which is one silver lining from the whole covid-19 pandemic from a financial point of view.

The level of uncertainty that we are seeing right now, and we have a lot, particularly in the oil and gas sector, some companies have closed and reduced operations and some have moved to other parts of the city which is creating economic challenges in different parts of the city. Ultimately that has led to reduced occupancy in our class A office space potentially leading to assessed value reductions in those areas on a go-forward basis. Overall we do have some reserves, we'll certainly plan on tapping into them. We are going to be announcing our budget on December 7th, so overall we will get through 2020 and 2021, but uncertainty is, like for us all, certainly a huge factor that we are dealing with.

Kevin Martin, RBC: Thank you Derek. I think you have some very envious colleagues around the table right now with that news on the transit being slightly over budget, that's incredible given this year. Mansoor, we've had a chance now to hear the economic backdrop, the challenges and opportunities that each of the municipalities have faced thus far through 2020. How has it been from a market perspective in terms of issuance this year, broadly for the public sector in Canada, but also more specifically in terms of the municipal issuance that we've seen in 2020?

Mansoor Khan, RBC: Usually I would start off answering this question by saying it has been quite a year but I don't think I need to reiterate that given what you've already heard on this panel so far. It has definitely been interesting on the market side as well. Just talking about the public sector as a whole, we've seen enormous amount of issuance this year compared to previous years. We've certainly seen provinces, global SSAs as well as Crown Corporations increase their borrowing programs significantly this year. What we saw early on this year was a lot of these public sector issuers trying to get as much funding done as possible because of the uncertainty that lied ahead in the fall.

Specifically for municipalities, they obviously benefit from the fact that they only borrow for capital projects which meant that their borrowing programs didn't change too much. If you compare every single year, municipal issuances is usually $5 to $5.5 billion annually, and that was consistent this year as well, or perhaps marginally higher. However, there were a few interesting observations in the municipal space which I think are worth highlighting. The first is that usually municipal issuance spans across the spring and fall periods. Historically you would see roughly 50 to 60% of the issuance in the spring, and the remaining would be done in the fall. This year, we saw that change noticeably with ~80% of the municipal funding completed by August. I think it was just a reflection of the markets, similar to what I mentioned about Provies earlier, that everyone was trying to make sure that they do most of their funding early in the year given the concerns regarding a potential covid-19 second wave in the fall. So we certainly saw a lot of the issuance pushed to the early part of this year. If you go back to March-June period, we were seeing issuance 3 to 5 times higher than the monthly average we would've seen in 2019.

The other interesting thing that was noticeable in the municipal space at the peak of the crisis was that we weren't seeing too many investors engaged in the long-end of the curve. We started to see issuers issue in the short-end. MFABC who usually does a 10 year issue in the spring, ended up doing a 5 year. Later on, despite market conditions improving, TransLink who would have ideally liked to do a 30-year ended up doing 10-years as there was better demand there. The last thing I would say is that there was an interesting dynamic between the different products within the municipal space, where we were not able to do any serial bond issuance due to a lack of demand. Even when the market conditions improved, it took a while before we could get the 1-10year serial done again. For issuers who wanted to do longer term serial issues, they had to wait until late summer to get those deals done. So the way the municipal market returned was with bullet bonds in the short end, followed by longer term bullet bonds. Then we had 1-10 year serials back in the market followed by 1-20 year serials. So those are some of the interesting observations that stand out for 2020. The good news is that things have changed since the spring and now we are back operating in a fully functional market.

Kevin Martin, RBC: It has been remarkable how the market has bounced back from those troubling days in March and beginning of April. From an issuance perspective, we were essentially at a stand-still and it has been encouraging to see how things changed rapidly for the better during the late spring, into the summer, and continuing on through the fall. Even with the second wave, it's been encouraging to see the issuance activity uninterrupted and, more importantly, the subscription from investors has been quite good, quite well received, which is great to see. Let's turn to support from other levels of government, Christine touched a bit on this in terms of the TransLink experience and the assistance received from the Province and from the Federal Government. I would like to hear the perspectives from all the municipalities on the level of support that you are receiving from both the Provincial and Federal levels of Government and how that's helping to stem the tide of what has been a lot of red ink on the budget side.

Heather Taylor, City of Toronto: Every province's experience is going to be different based on the way the Federal Government has negotiated the arrangements with each of them. I want to give some context before I jump in to funding. Early on in covid-19, as I mentioned the GTHA (Greater Toronto Hamilton Area) got together and shared financial information. That became really important when we started negotiating with the Province and informing their program. What they became aware of, which was supported by data, was that municipalities that had transit systems had much more significant financial pressures than municipalities without transit. That was no different across the country. When we were early on in covid-19, we convened the 6 big cities across the country and were gathering the same type of financial information to inform the Federal Government's policy conversations. When these programs were announced, valuable information compiled had been given to them to help form their polices. I think we need to give the Province huge kudos, because the way they structured the arrangement in Ontario was that they acknowledged the three main drivers or "buckets" in covid-19. Those being: the transit bucket; the municipal bucket: and finally the social services bucket. When you look at the fact that these three elements really drove the funding package the province of Ontario negotiated with the Federal Government. I do think that the collaboration that we initiated early on was really impactful in the way the programs were designed.

> ...municipalities that had transit systems had much more significant financial pressures than municipalities without transit.
>
> *– Heather Taylor, City of Toronto*

In Ontario, I would say the majority of municipalities are kept whole based on the way the funding came about. There are a lot of municipalities that have funding that will carry them over in to 2021. And so when you look at the transit funding, it is dedicated to the handful of municipalities who have transit systems and have been hit harder due to lost ridership. Phase 1 of the Safe Restart funding was all based on formulas. It was done that way to make it equitable across the province. Transit was based on ridership, the municipal bucket was based on households, and the social service bucket was based on the number of shelters and shelter beds. That was an equitable distribution in Phase 1.

Phase 2 is now underway and it's based on an as-needed basis. As I mentioned, just in speaking with colleagues across the province, we know the majority of municipalities are good after Phase 1. The City of Toronto has received just over $660 million in Phase 1, which to many probably seems like an extraordinary amount of money and it absolutely is. The issue is that our pressures were extraordinary so we found just over $500 million in savings, we received just over $600 million from other levels of government and we still need another $500+ million. Christmas is a few weeks away, I'm really hopeful that we're going to get an early Christmas present and we will be made whole by the end of 2020. However this is unprecedented times and we are trying to balance 2020 and trying to project 2021.

I think it's really important that the other levels of government have a sound understanding, again supported by data that speaks to the fact that the covid-19 realities and the covid-19 experiences that we've all experienced, based on those three buckets, aren't going away in 2021. The level of support in 2021 is going to have to be very similar to what we received in 2020 because we don't know how many subsequent waves of covid-19 there will be. The vaccine timing is uncertain, covid-19 isn't going to disappear, despite what some people south of the border maybe thought at one point in time, but at the end of the day, we are optimistic about 2020, we are hopeful about 2021. It's still going to take a significant amount of collaboration and data compilation and sharing with the other levels of government to truly give them that insight into what the pressures are. Hopefully that provides a little insight as to where Toronto stands.

Kevin Martin, RBC: Thank you very much Heather, I guess we know what's on top of your list for Santa this year! Laura, let's bring you in to this while we are still talking about the support in Ontario.Is there anything specific in terms of senior government support to the municipalities in York region that you wanted to comment on?

Laura Mirabella, Regional Municipality of York: From proportional perspective, York Region is about 1/6 the size in dollar value of Toronto and so the support that we received to date, in firm commitments, is about 1/5, so $93 million and counting, which covers the general safe restart funding, it covers phase 1 of the transit, and a variety of the special programs like additional child care funding, the social services funding, and some incremental public health funding. What we have found is that it has covered about half of our incremental costs and we have been able to find the remainder of it from within. From the actions that had been taken, hiring freezes, some lay-offs, we were able very early to adjust our transit service levels, so we were able to reduce them by a third. So not as much as the reduction in overall ridership but it did allow us to mitigate some of that impact. As a consequence, while we expect to receive some phase 1 funding for transit, we are not likely to receive any phase 2 funding for the regular municipal program because we will not finish the year in a deficit, which was one of the province's key criteria. As well, we have robust reserves at the Region, and that was another key criteria that the province looked at. Essentially, if you had tax levy funded reserves, they wanted you to look there first. We have about $3 billion overall in reserves, and of that, about $110 million is true contingency reserves, which we would need to likely deplete first before the Province would come back with general funding.

We were very pleased that within the provincial budget, they committed to continuing with the incremental public health funding and since that makes up more than half of our pressures going through 2021, that bodes very well for us. We are continuing to work with Toronto and other municipalities to advocate for more, because as Heather mentioned, the length and severity of the pandemic is still a huge unknown. We know, we've worked on our budget, which we are not planning on tabling until February, because we are reluctant to try and nail it down until after the Provincial budget. It is going to be based on the best information at the time. As to the recent Federal announcements, I know that they have announced some additional housing funding, the rapid housing funding, and much of that will go to areas like Toronto, where they have much larger and disproportionately sized at-risk populations. As York Region has grown and urbanized, it is facing some of those same issues so we are definitely looking to the Federal Government to get a sizeable share of some of that housing funding to deal with some of our at-risk populations as well.

Kevin Martin, RBC: Thanks very much Laura. Mehdi, can we get your experience in terms of how Quebec has handled the funding for Quebec based municipalities, specific of course to Montreal's experience? It would be interesting to know how it has gone in terms of funding from both the Province and Federal side.

Mehdi Alani, City of Montreal:The first wave of covid-19 was strong in Quebec and in Montreal. Like Heather mentioned, there are two types of cities: Cities with transit and cities without transit, and Montreal is a city with transit. After the lockdown, the ridership of the STM, which is the public transit organization in Montreal, the ridership dropped to 10% but the STM maintained its services at 95%. Of course, this created a major shortfall to the funding of the transit system. We had a head start in asking for government contribution. The Provincial Government offered, at that time, $400 million to the transit system in Quebec, which would have covered only 50% of the shortfall. It was clearly not enough. Meanwhile, the safe restart program came along, where the federal government pledged $1.15 billion to Quebec municipalities and the Province of Quebec matched that amount. This makes it a total of $2.3 billion for municipalities and for the transit system in Quebec. As we stand, like I said earlier, the City of Montreal has received $180M in 2020. Apart from the transit, we are expecting to receive $80M next year, of course this depends on how long and strong the second wave is going to be. As for the transit system, it is a bit complicated. The STM does not receive the help directly from the provincial government, but through a provincial agency, which oversees the transit in the Greater Montreal Area. They are called the ARTM (Agence Regionale de Transport Metropolitain) and we estimate they will receive $900 million out of the $1.2 billion of the total Quebec aid this year and next year.

Kevin Martin, RBC: Thank you very much Mehdi. Derek, what has the experience been like for St. John's and more broadly for Newfoundland & Labrador in terms of Provincial and Federal assistance?

Derek Coffey, City of St. John's: When we look back at the transit stream, that's not even an option that we've been going down because overall from the transit system we haven't had a loss. So we took that funding off the table immediately. The Province, through discussions back and forth within, decided it wasn't a route worth going down. From the operating side, we only received notification yesterday that funding is starting to flow hopefully next week. This will roughly cover 1/3 of our deficit for 2020. We haven't heard any blowback from other municipalities around the province. They allocated and they are handing over the money totally unrestricted to be used for whatever purposes we see fit. So you know, the Province didn't do an extreme amount of engagement on how the funding was going to be allocated but they seem to have come out to a fairly good story. I have been talking with some of my colleagues here in the Northeast Avalon, and everyone seems generally overall happy with the response from a fiscal perspective that we got from the Province.

Kevin Martin, RBC: Thank you very much Derek. Peter, can you share with us how the cooperation has been both from the Provincial side and Federal side with respect to the municipalities in British Columbia?

Peter Urbanc, BCMFA: First, I will mention again that transit is in a sense out of the equation for MFA. I am going to point out that the BC local government system has, taking transit out of the equation, a very low reliance on operating grants from other layers of government. I believe roughly 1.5% of local government operating revenues come from grants from other layers of government in BC. If you look at overall revenues, including those that would support new capital investment, I believe grants represent under 7% of our total spend, which is about 2 to 4 times less support from senior levels of government in in BC relative to other jurisdictions in Canada.

> Local Governments in BC are in a unique position in that they can borrow to a very limited extent for operational purposes to meet intra year cash flow needs – we call this program Revenue Anticipation and it must be paid back within a calendar year, as soon as tax receipts are received – regulation changes allowed for the normal repayment schedule to be pushed back a bit.
>
> *– Peter Urbanc, BCMFA*

Among the first thing that the BC government looked at in deciding on support for the local government system, was the extremely healthy level of reserves, both operational and long term, in the system. If you look at net debt in the local government system in BC it is very roughly about $5 billion net debt (after netting sinking funds against market debt), but then you have north of $12 billion of cash and investments in the form of reserves held by our Members. We are very flush with cash in the system, I would say it is a function of a general aversion to debt. And when our clients do borrow, they want to pay it off quickly. Our most common amortization period on loans is 15 years, even when the borrowing supports infrastructure with 30 years, 50 years or even longer of expected life. When covid-19 first hit, the BC government decided not to immediately provide grants to local governments. Instead, they enabled local governments via emergency regulation changes to use their own resources to deal with the budgetary pressures. For example, the Province temporarily allowed local governments to borrow from their own capital reserves, to fund operations, and to pay back those funds over five years, with no interest. They also allowed municipalities to hold onto provincial school tax collected, until January 2021, and enabled repayment of any revenue anticipation (operational) borrowing over two years, instead of one. Finally, they allowed MFA to lend for operational purposes over a longer cycle. Local Governments in BC are in a unique position in that they can borrow to a very limited extent for operational purposes to meet intra year cash flow needs – we call this program Revenue Anticipation and it must be paid back within a calendar year, as soon as tax receipts are received – regulation changes allowed for the normal repayment schedule to be pushed back a bit. I am happy to say, however, that no additional Revenue Anticipation borrowing was tapped in 2020, the numbers were at about the same level as in any other year. A real testament to the heavy lifting done in right-sizing budgets throughout 2020.

Christine talked briefly about grants that local governments received. Local governments in BC only just recently, we are talking the last few weeks, got their Safe Restart grants amounts - they total north of $400 million. While those grants were broadly distributed, they were weighed towards smaller communities. The Province recognizes that smaller local government entities do not have the same flexibility and reserves levels held at larger municipal entities. In conclusion, I would say that the BC local government system received less direct support from the higher levels of government than other jurisdictions but they were not as critically needed, as our lower debt levels, higher reserves, and low reliance on transfers have made us more resilient in dealing with unexpected shortfalls.

Kevin Martin, RBC: Thank you Peter. That's a very interesting point on the ability to borrow against the reserves. Do you have the ability to track that or do you have any observations on whether BC municipalities are actually making use of that tool?

Peter Urbanc, BCMFA: You know, I have to tell you, much less than we thought would be the case. So, I talked about Revenue Anticipation: in March and April we scrambled to negotiate back-up facilities to support a larger commercial paper program to support that type of activity. Whether local governments use Revenue Anticipation via MFA or borrow from their own reserve, they are effectively borrowing for the short-term. As I have said we have seen no additional uptake of that program which did surprised us, and again reflects the difficult belt-tightening that took place in BC. Anecdotally, I can tell you that the largest local governments have not really borrowed from their own reserves to any great extent. So, there seems to be a lot of dry powder out there in BC to deal with pressures if covid-19 were to persist for another year or two.

Kevin Martin, RBC: Thank you Peter. Christine, earlier you provided us with an overview on the emergency funding that TransLink has received thus far, any further comments in terms of support from the provincial or federal side?

Christine Dacre, TransLink: Early on, the first signs of problems that we were going to have was in our property tax revenue. We get just over $400 million for 2020 in property tax revenues and a lot of the municipalities were talking about deferring their collection of the property taxes. So, us getting that funding was at risk. We do have a commercial paper program which is what we utilize for our short term borrowing. We count on that for the property tax revenues we get mid-year to help us with our cash flow. But early on in the crisis there was a risk related to our ability to utilize the commercial paper program and we were quite nervous about that. Then the Province brought in a program with an interest free loan to the municipalities for the property taxes if they were going to defer the collection of them for a few months so that we could get that revenue from the municipalities. So that helped us and took one risk off the table.

The other one is our fuel tax revenue, without knowing the drop that it was, the Province provided us with the higher level of fuel tax revenue, and because they do the collection and then they send it to us. We were actually getting more revenue than we should have, so that helped in our cash flow as well. That was the second part of assistance that we got. And then the bigger chunk, Heather commented on the collaboration, it was huge! We collaborated and worked really well with the Province. They really were the advocates to the federal government for us. They did a lot of work with us on understanding all the detail of our finances, what our predictions were, and where we needed help and they also wanted to make sure that we tapped into our reserves too. We fortunately didn't really have a liquidity problem because of our reserves, but we still needed that emergency funding since that can only carry you so far, then you go over the cliff. So they worked really closely with us, and BC Transit, and BC Ferries and really lobbied the three of us together to the Federal Government, and if it wasn't for that collaboration, I don't know that we would have been as successful. So those are the three areas, mainly, that we really worked on in getting the funding.

INTEREST RATES

Kevin Martin, RBC: Let's move on to the next segment which is interest rates. Simon I'd like to bring you back in to the discussion here please. Can you give us an overview of where RBC sees interest rates in Canada going over the short term?

Simon Deeley, RBC: In 2021 basically we see yields moving higher, so term yields moving higher from where they are now. For example the 10y yield finishing next year at 90bps from about 75bps currently, though we do think there is upside risk to that. So we expect some curve steepening while the front-end, 2y especially, remains well anchored by the Bank of Canada's forward guidance on rate, which they said they will not move, essentially until slack has been absorbed and they are on track to reach the 2% inflation target which they estimated in 2023, in late October. Certainly, that will keep the front-end well anchored and that is why we expect to see some steepening. The Bank of Canada purchase program - the buying of Government of Canada bonds - has kept any steepening in check for the most part. But we do see some modest steepening, let me say that, rather than a full bear steepening and a really high move, we expect some modest steepening. Part of what we expect is government bond issuance to be lower next year, but still quite elevated historically, with Bank purchases smaller alongside. Our curve is very tied to the US curve, we tend to lag U.S. moves but follow in terms of direction. So we do expect Treasury yields to move higher and now that will reinforce the trend as well. Part of this is, positive vaccine developments as we kind of enter maybe not post-pandemic, but a different phase of the pandemic with the vaccine roll-out, obviously slated to be a bit later in Canada but still those positive developments should be supportive of a steeper curve.

In terms of when we would expect any kind of interest rate move, so the timing on an interest rate hike, even with positive vaccine developments we really don't see it occurring until Q3 2022 at the earliest, and that wouldn't really be our base case, we think the late 2022 - 2023 timeline is fair. It is not really a question for the next 12 to 18 months, so it definitely wouldn't be in our 2021 profile. That is because there is a high degree of slack still in the economy. We are over 5% below the 2019 Q4 level in terms of output, but potential growth on the supply side of the economy is still growing but smaller than before, so we don't have to just get back to the 2019 Q4 level, you have to get to where that supply-side is in 2 – 3 years from now. That will be a factor in keeping the Bank with policy anchored at the 25bps current target.

> ...the timing on an interest rate hike, even with positive vaccine developments we really don't see it occurring until Q3 2022 at the earliest...
>
> *– Simon Deeley, RBC*

Kevin Martin, RBC: Thank you Simon. Mansoor, we've seen an extreme reaction in Canada bond yields this year. How have bond investors reacted to the drop in yields? What are some of your observations based on investor behavior over the last few months?

Mansoor Khan, RBC: As Simon mentioned, the yields have certainly dropped considerably this year, resulting in impressive all-in funding costs for municipalities. Just last year, in 2019, 5y, 10y and 30y funding was somewhere around the 2.2% to 2.6% range while this year with the rally in the rates market and spread tightening we've actually seen yields drop down to as much 1.5% in 10 years, closer to 2.3% in 30s, and less than 1% in 5 years. So, yields have certainly dropped quite dramatically with good buying activity in the 5-10 year part of the curve. The municipal credit has changed notably this year with the 10/30s moving from ~10bps to over 20bps primarily because of the aggressive tightening in the 10-year part of the curve. Ever since the Provincial Bond Purchase Program was announced, we saw the Ontario spreads tighten in considerably, so investors started looking for extra yield, which municipal bonds were offering. The need for HQL assets further aggravated the tightening move. The long end however, still looks cheap and it will interesting to see how the shape of the curve changes in 2021.

Kevin Martin, RBC: That will be good news for our fellow panelists here so let's open the floor to the municipalities. Certainly, as a group you've all benefited from lower interest rates, as have all the other bond issuers in Canada. I'd be curious to get your perspective on what your respective capital borrowing programs look like over the near term, specifically for 2021. Can you provide some insight in to what your respective borrowing programs might look like realizing that everything is still in a bit of a flux, you're in budget mode right now so we won't hold you to it, but any sort of indication you can give us would be appreciated.

> We have seen a lot of treasuries buying munis to asset-swap them. With the amount of stimulus out there, bank treasuries are flush with cash and they are increasingly buying munis.
>
> *– Mehdi Alani, City of Montreal*

Mehdi Alani, City of Montreal: Like Mansoor mentioned, the all-in yields have been record-breaking this year. One other reason why there is a lot of buying in the 10y sector, is probably the Bank's treasuries. We have seen a lot of treasuries buying munis to asset-swap them. With the amount of stimulus out there, bank treasuries are flush with cash and they are increasingly buying munis. In terms of the capital program, we have a capital program of $18 billion over the next 10 years. Next year, our borrowings will be probably around $1.5 billion, then it will stabilize between $1 billion and $1.5 billion for the rest of the decade. Whether this is going to be impacted by higher yields, of course it is something to consider. Montreal is one of the oldest cities in Canada and it has a lot of infrastructure to retain and repair so postponing some of this work or capital spending can be a bit tricky and can trigger other important costs. Good balance must be achieved, and we are clearly watching the rates going forward.

Kevin Martin, RBC: Thanks very much Mehdi. Peter, what is MFA's borrowing program looking like in to 2021 and beyond?

Peter Urbanc, BCMFA: Our borrowing program is going to be up slightly over the next few years. A big part of that is function and refinancing, not necessarily increased capital spending by municipalities in BC. We have not seen a big pullback in terms of Member's plans around capital spending. I cannot speak to TransLink, this is just general infrastructure for local governments in BC away from transit. We will be borrowing roughly $2 billion for 2021 and about the same for 2022. We are going come back to issuing 10-year bonds and 5-year bonds - 10y for new issues and 5y for refinancings. Our borrowing model has always been to issue 10y bonds when offering new loans to Members, and refinancing after that in 5y increments. Members are borrowing under an amortizing structure for terms they pick – typically 15 years, but can be from 5 to 30 years. MFA borrows bullets in the marketplace, but receives principal and interest from our clients every year, and that principal is invested in the sinking fund portfolios with those earnings returning to our Members after the debt has been repaid. This unique model has been a boon toBC tax-payers because we've locked in 10y and 5y rates, not higher 20 or 30 year rates, and our borrowers have been paying us back principal over 15, 20, and up to 30 years. We have been re-investing those principal payments to the longer maturity date of the amortization period they pick. Our model is not so unique in the sense that historically many governments around the world have run their own internal sinking funds, so one can create it internally, but our model forces it upon the entire system - and as I said it has been a windfall for local governments. Given the current term structure of interest rates, it will be interesting to see if our model will be as beneficial as it was in the past going forward. The model becomes less attractive of course as the yield curves flattens, and it may even become a bit of a problem in a persistent inverted yield curve scenario, but we believe it is still a very valuable approach, in terms of managing the Members' credit risk on our balance sheet. The direction of interest rate movements, whether rates are moving up or down, does not seem to impact the validity of the model.

Kevin Martin, RBC: Thank you Peter. Christine, in terms of capital plans going forward, have they been impacted in terms of forecasting? What are you expecting in the near term for 2021 and 2022 in terms of capital expenditures and how will that feed in to your anticipated borrowing requirements for the year ahead?

Christine Dacre, TransLink: We're not looking at our capital really changing. Most of our capital is really to maintain our assets in a state of good repair. We want to make sure that our infrastructure is maintained properly so we don't have any surprises down the road. Our other capital spending a expansion projects and some of our state of good repair are partially funded by Senior Government, some Federal funds, some Provincial funds, and the Federal Gas Tax Program comes to TransLink in the Lower Mainland. We're not anticipating reducing those spending levels and really as the projects go on, that's in our 10 Year Plan, we don't see a lot changing. We're evaluating or preparing another Ten Year Plan. Originally, before covid-19 it was going to be Phase 3 of the Mayor's Vision but it's not going to be now. It's really going to be more of a stabilization.

As I mentioned earlier, we do have a systemic issue with our revenue, driven by the fare revenue. We don't know in how long that's going to come so we need to find a replacement to fill that gap in our next 10 year investment plan. Following that, will be more on the expansion side so we're looking at about $300 million in needs for 2021. It'll grow a bit more because of the timing of those expansion projects that we have underway that have secured federal funding. I will also mention that the stimulus, someone had mentioned the stimulus funding, we know it is coming, right? We know that governments are going to want to get the economy going and put in more. We are fortunate that we do have a lineup of projects that are pretty much ready to go. So depending on how that all unfolds, that might increase our capital spend from what is in our current investment plan, so we will have to wait and see. Our state of good repair funding, we need to do that, so we are looking at about $300M next year.

Kevin Martin, RBC: Thank you very much Christine. Let's move to Ontario now and Laura, can you give us an overview on what municipalities within York Region are expecting for capital expenses and what that means for your borrowing program?

Laura Mirabella, Regional Municipality of York: Our local municipalities do capital budgeting possibly for shorter periods of time, for the Region, the bulk of the borrowing is related to, we do a 10y timeline, so our expectation in our forecast is that we need to borrow about $2.9 billion over the next 10 years, and about a 20% of that will be for re-financing. This year, we actually pre-borrowed some of what we would need to re-finance next year and we did that because of the historically low rates. But, generally, we are not anticipating any major changes to our capital program as a result of the interest rates themselves, the capital program is really basically driven by our annual budgeting process and our long-range fiscal planning.

This year, we actually pre-borrowed some of what we would need to re-finance next year and we did that because of the historically low rates.

– Laura Mirabella, Regional Municipality of York

Kevin Martin, RBC: Thanks very much. Heather, do you have any comments on how the capital budget looks for the next year or two and what that means for Toronto's borrowing plans?

Heather Taylor, City of Toronto: Similar to colleagues that have already spoken, we have a detailed 10 year capital plan. For the City of Toronto it's just over $43 billion. The interest rates, and believe me, I enjoy the low interest rates for sure, but for the City of Toronto we finance about 17% of our capital, so as much as we will enjoy the low interest rates, the next couple of years, I know next year we are planning on about $915 million in borrowing, and then 2022, as of right now, and who knows, as Christine mentioned, Federal Stimulus can affect the amount of borrowing would actuallycome down. The one thing I want to point out though, as we enjoy low interest rates in debt financing, while we have our reserves and we are investing them in the markets we are also making lower returns, there is always another side to that coin.

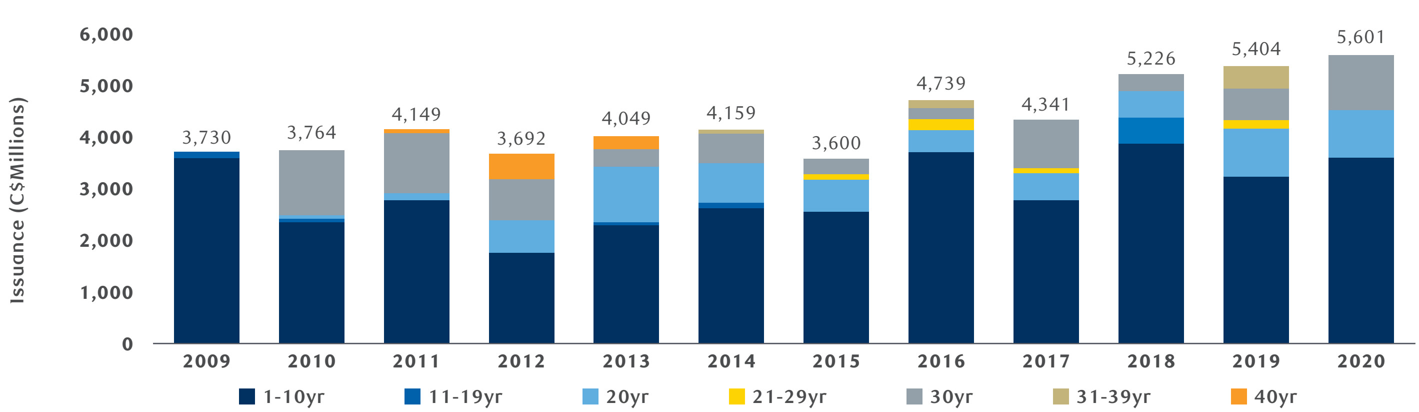
However, I think, a bit different than the other colleagues have mentioned, the City of Toronto finances capital projects once they are completed. We do fund them from our working capital, and once they're completed, we go out to the market and we debt finance based on the useful lives. So, our capital plan is built with those assumptions in mind and we're quite conservative with our debt servicing ratios. As much as interest rates are low, can we take advantage of it? Can we go out and finance more? Based on where we are in the Ontario economy, we also have to be very mindful of the market capacity in what can be accomplished, so we are trying to delicately balance the ability for the industry to respond to capital natured projects as well as what we can afford. A few competing priorities in there but more specifically to your question about our borrowing plan for 2021, as it stands, at this moment in time, based on our 2020 plan, it is $950 million.

Kevin Martin, RBC: Thanks very much, and that is a great point on low rates being somewhat of a double-edged sword for those running investments and sinking funds. Derek, City of St John's returned to the debt markets in 2020 marking the first time in 4 years that we have seen a bond issue from the City. Can you comment on future borrowing plans for the City in terms of your capital needs going forward?

Derek Coffey, City of St. John's: It's funny, as Heather was speaking I was agreeing with a lot of her comments, of course we are much smaller than City of Toronto but a lot of the challenges and things they are doing, we are doing as well. We finance a lot through our working capital and when we get to the end of the projects we tend to term out the financing. We probably finance a much higher portion. Much of our capital work is undertaken when there is cost sharing agreements in place. Usually the City at the end of the day is only on the hook for 30%, maybe max 50% of a project, we term all of that out and it filters back in as debt charges. We're trying to guide our council to take advantage of these cost shared programs and low interest rates as much as we can. One big one that's on our radar is secondary wastewater treatment and right now it's in the order of magnitude of $250 million, which relatively, for some other municipalities is small, but that would be the single largest capital project we've ever had to undertake here at the city.

We are anticipating no change in our cost-sharing agreement with the Provincial Government. That said with some of the budgetary challenges that the province might have, it could be possible that we see a reduction in the matching funding and that could certainly have an impact on our spending. But there's also significant political pressure on our end with the Federal Government and Provincial Government coming to the table with funding programs, the city of St John's needs to be there to be able to take advantage of it. As we often say to council: fix it now, or fix it later and pay double. That might be a bit of an extreme but if you're fixing emergency repairs it's not exactly a great scenario. We're trying to balance that with the other increasing pressures. The direct program service delivery as opposed to fixing pipes underneath your street. So we are trying to balance it all but we don't anticipate cutting back on our capital spending, we are trying to be more aggressive as Heather commented. The investment returns have also peeled off and every time we go to market we use our own sinking funds to buy a portion of our own debt and that has been very successful for us in the past, funding the other 50% of our debenture repayments. That is not going to work on a go-forward basis so it's impacting our own cash requirements. It can make it more challenging and expensive overall to finance on a go-forward basis but there's no plans to slow down, yet. Certainly more intense pressure on forecasting 3, 5, even 7 years out to see where we are going to be and make sure we will still have the capacity to handle that because it is the necessary investment that we will have to make.

ANNUAL C$ MUNICIPAL ISSUANCE



Source: RBC Capital Markets

GREEN BONDS, ESG FRAMEWORKS, AND OUTLOOK

Kevin Martin, RBC: We're going to move to our next segment now - green bonds and ESG frameworks. Mansoor, at RBC you have been deeply involved in the sustainable debt market since it began here in Canada in 2014, how have you seen this market evolve both globally and domestically here over that time?

Mansoor Khan, RBC: As you know, I can probably talk about this for as long as you want, but I will try and summarize a couple of things here. Generally speaking, talking about the global ESG bond market, there have been a number of interesting developments that have happened this year. Historically, in terms of labelled bonds, the Green Bond market has been the most prominent for years. This year, however, we've seen increased level of social and sustainability bond issuance. To give you some context, in terms of green bond issuance last year we had ~$266 billion of issuance globally (USD equivalent), while this year so far we've actually seen less green bond issuance, around $211 billion or so. But if you look at all of green, social or sustainability bond issuance, we are a bit higher this year compared to last year. The composition of this number has changed, where in previous years green bond issuance was roughly 70-80% of this sector, this year it has been closer to 50%, which again highlights the fact that social and/or sustainability bond markets are growing rapidly.

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– Mansoor Khan, RBC

There have been over 1000 issuers globally who have accessed the green bond market, but talking about Canada specifically, it is a much smaller portion. This year in Canada, we've had about $12 billion of GSS bond issuance across over 30 issuers who have accessed this market. Most of the issuance has been in the green bond space. This year, however, we had City of Toronto do their inaugural social bond issue making them the first public sector issuer in Canada to do a social bond. It certainly has driven a lot more conversations with other municipalities and provinces alike. Kudos to Heather and team for putting that together, and it is certainly something that I think will continue to grow in Canada. There are a number of issuers that have done green bond issues, but we are starting to see some of them now establishing sustainability bond frameworks, which will allow them to issue either green, social, or sustainability bonds. City of Vancouver updated their framework this year reflecting that change.

Other things that I think are notable and worth mentioning here are transition bonds. It is a big theme in Canada and there have been a number of working groups that have been set up in Canada as well as in Europe to discuss this. Given the relevance of the oil and gas sector in Canada, we expect transition bonds to be a key topic in the coming year. Some of the advantages of issuing a GSS bond in Canada include getting a clear pricing advantage compared to conventional bonds. I would say Canada is a bit unique in that regard compared to some of the other markets because we have certainly seen pricing benefits anywhere between 0.5bp and 2.5 bps over the last few years. Even in the recent Toronto deal that we (RBC) led this week, we saw 2-3bps of savings on that transaction. I think that is something that is more unique to Canada at the moment. In general these bonds also trade through the conventional bond in the secondary market. Some of the other benefits include finding new investors, which we've certainly seen consistently. Additionally issuers also benefit from the positive publicity when doing these transactions. So may be in the interest of time, I will pause there and turn it over to the other panelists.

Kevin Martin, RBC: City of Toronto has been one of the pioneers in terms of green bond issuance in Canada and the timing excellent, because as Mansoor mentioned, RBC was pleased to lead Toronto's most recent green bond offering in December, congratulations on that offering Heather. Perhaps you can give us insight into how the city is approaching, not only green, but as Mansoor noted, blazing the trail in terms of social bonds as well earlier this year. Can you highlight some of the benefits that you have seen from both of those programs?

Heather Taylor, City of Toronto: Like Mansoor, I could probably talk a long time about this. It is part of my passion and being the CFO of the City of Toronto, the fourth largest government in Canada, it is an opportunity to truly be a leader. It is an opportunity for us to highlight that the way of the future has to give priorities and thoughts to a different way of financing. If you think just for a second, from a context perspective, before covid-19 reared its head, there had been momentum gained in the climate change arena and then all of a sudden covid-19 arrived and it's been an accelerator to actually address social inequities. From the City's perspective, we were already on the path to doing a social bond framework. I was in Europe late last year, met with investors there, and as we all know Europe is ahead of North America in its thinking and actions, I was committed to making this a priority. The wonderful thing for us, you have to look for a silver lining in covid-19, and the wonderful thing is covid-19 has been an accelerator. It actually raises the awareness and the importance of looking for returns on our investment beyond dollars. It is about the social returns, the alignment with what municipalities are all about is ideal. Municipalities are about delivering services to their citizens and if you think about what covid-19 has done, long-term care, child care, shelters, the need for housing, it's all well aligned for the social aspect of the ESG framework. For us, we consciously went to the market with both, green, which we were already doing, and with the social framework, to ensure that we were opening the doors to investors to a broader investor base. Mansoor, think about yesterday, our green bond was 4x oversubscribed, we had investors in Asia and in the Middle East, and it's just additional proof that investors are interested in this space.

> Municipalities are about delivering services to their citizens and if you think about what covid-19 has done, long-term care, child care, shelters, the need for housing, it's all well aligned for the social aspect of the ESG framework.
>
> *– Heather Taylor, City of Toronto*

The more that we can introduce accountability, and from my perspective, that is what the City of Toronto is doing by committing to do this on an annual basis. We are committing to increasing the profile, we are committing to ensuring that when we make our capital decisions, we have incorporated these elements. When we are looking to the outcomes of our programs, we are looking to the ESG factors. From my perspective, this is increased awareness and accountability, and hopefully others will feel inspired to follow suit and jump in. Because think about what happened with green bonds a few years ago, there were a few that led and others joined, Mansoor just talked about the magnitude of the green bond program. I am hopeful that social bonds will gain the same type of attention and traction and it will change the way we do business going forward.

Kevin Martin, RBC: Thank you Heather. Recently the challenge from the issuer's perspective is finding eligible projects that are suitable for green, social or sustainable frameworks. If you look forward over the next couple years Heather, how is the pipeline looking for both social, green, and potentially sustainable type projects that you could use to finance? Do you see the proportion of your funding program getting more green and social as time goes on?

Heather Taylor, City of Toronto: That is where I am saying that it actually helps decision makers decide. We have a 10 year capital plan, and by all means it doesn't mean that it is everything that the City needs to do. But what we have done is introduced a prioritization framework that gives green projects and it gives social-outcome based projects priority. It is how we help prioritize what gets in to the capital plan. Now, this particular framework is an influencer.

Mansoor Khan, RBC: I wanted to add a couple of points here. I completely agree with Heather's comment on Europe, they are ways ahead. You have probably heard about the EU taxonomy that came out recently, and there have been a lot of discussions on that. I won't go in to those details, but the reality is that European issuers and investors are ahead of the curve and are certainly more aggressive on achieving their targets. They are also making huge strides on the social bond front with the EU issuing social bonds this year, which will further develop this market in the coming years. The last point I want to make is, you mentioned how, when this market started off, a lot of issuers didn't really take it seriously, and I remember back in 2014, when Ontario was setting up their Green Bond program, there were a lot of questions around whether this market could ever grow. I can tell you that those conversations have evolved drastically over the years and it has been quite incredible to witness that. Everyone's focus has spiked over the last few years, and I think that will continue into the future.

Kevin Martin, RBC: Let's bring Christine to the conversation as well, because TransLink is also an established green bond issuer. Can you comment on TransLink's green bond program and potential issuance plans for 2021?

Christine Dacre, TransLink: Most of our projects do fit in. I'd say about 75 % of our capital projects qualify as green bonds. I've been very clear that when we can do a green bond, we will do a green bond. It really depends on the timing of the capital spend of our projects. We really like the lookback feature because then we are not borrowing so much ahead and then having to hold that money. We certainly see it as a big part of our borrowing program, always, going forward. Our Director of Sustainability is doing some research on the sustainable social bond side. She would really like to get into that area to look and see what we can do there. So, I might put her in contact with you Heather to pick your brain! She feels very passionate about that as well. I think the benefits to us on our green bonds is really the expanded investor base. Clearly, that has been what we have seen in the green bonds that we have issued so far. From a publicity perspective, not so much, although of course we publicize it. Our projects are mostly green anyways and I believe people realize that, so it is really the expanded investor base that we see as a big benefit to us. So we will continue to explore the social bond framework and what that means, and what that can mean for TransLink in the future.

> 75% of our capital projects qualify as green bonds. I've been very clear that when we can do a green bond, we will do a green bond. It really depends on the timing of the capital spend of our projects.
>
> *– Christine Dacre, TransLink*

Kevin Martin, RBC: Thanks very much Christine. Let's just maybe keep it in BC for a moment, Peter I want to bring you in to the conversation here. It is a little more challenging from MFA's perspective in terms of issuing green bonds because your organization encompasses a lot of municipalities and agencies within the province so maybe you can give us your perspective on ESG and what that means for MFA BC.

Peter Urbanc, BCMFA: I just want to echo something that Heather alluded to. The value to government issuers of issuing green, sustainable, social, or other "specialty" bonds, is sometimes viewed as being limited to the "publicity" it generates – or virtue signaling. I would prefer to say that there is value if it is forcing an organization to look at things differently. In Canada, I would be hard pressed to say that a single new dollar was put into a project (whether it be green or sustainable or social) that would not otherwise have happened. So, this is clearly not bringing new money into projects or activities that the government would not have done anyway. However, to the extent that these efforts help standardize disclosures, broadens thinking and internal views around these issues, then it is a positive. In BC, MFA gets constant pressure to consider issuing Green Bonds and offering Socially Responsible pooled funds to our Members, because citizens and their councilors are very interested in green and social. Sustainability has long been part of our DNA here out west. But as you mentioned, it becomes a challenge for us because when we issue a bond as investors appreciate the size and liquidity of our issues, so we do not want to cannibalize the regular bond program. If we were to issue other types of bonds, it would almost certainly impact the liquidity of the rest of the program in our view, as it is a small program to start with. If we were looking just at cost, the additional value we get from a few extra investors is likely negated by how it impacts the rest of our program. That is the first point.

We would much rather focus our efforts on improving ESG disclosures and issuing "regular" bonds rather than creating an artificial framework for a "specialty" bond.

– Peter Urbanc, BCMFA

The second point, and we have had dialog with many investors on this point, is that we need to remind ourselves that the nature of our organization is the same whether we issue regular bonds or green bonds – we view all MFA bonds as being either sustainable, green, or social. We would much rather focus our efforts on improving ESG disclosures and issuing "regular" bonds rather than creating an artificial framework for a "specialty" bond. At the end of the day, any money we borrow is fungible and frankly investors should care far more about the true nature of the issuing entity, not the nature of the specialty bond being issued. Going forward, we are going to disclose where the proceeds or any given MFA bond issue is being invested. The vast majority of our bond proceeds (maybe 90%+) meet existing green, social, or sustainable bond frameworks. For example, we lend to water and sewer-related capital projects, community support projects, recreational support projects, waste management, public health, transportation, public safety, etc. Going forward, we will map the use of proceeds of our bond issue to green and/or sustainable bond framework criteria, and to the 17 UN sustainable development goals. But we will not be reporting back the way a framework approach would force the issuer to report back. Firstly, it is a far bigger challenge for MFA to do so (relative to an individual municipal issuer) given any one of our bond issues may go to dozens or more Members - who may or may not have the capacity or capability to report back according to outlined criteria. But secondly, we do not believe we have enough standardization yet in reporting for it to be all that valuable.

Our aim is that over time, that every MFA bond will be viewed as a sustainable bond. In fact, in discussions withinvestors who manage socially responsible funds, we found that MFA bonds are already being purchased in most of these portfolios. Our bonds may not be eligible for, say, a "pure" green bond portfolio, but there are very few of those in Canada. The reality is for most funds managed in North America, we would be eligible to be in those portfolios, whether they be deemed green, social, or sustainable. In Europe, there are more of those dedicated green funds for example, but even some of them will still buy MFA regular bonds. Our primary intention is to improve and standardize disclosures over time, which I believe is the single biggest benefit of all these programs. As disclosures become better and more standardized over time, I am of the view that "specialty" bond types (green, social, sustainable) will disappear. One will buy a City of Toronto bond or an MFA bond because the proceeds help municipalities do all the wonderful things they do and we are all disclosing in a standardized fashion. Now that is going to take at least 5 years, maybe a decade, because there is a lot of work to be done on disclosures, but I think we will get there eventually.

Kevin Martin, RBC: It looks like you have a comment to make Heather?

Heather Taylor, City of Toronto: So, hurray! I love the fact that you talk about disclosure, Peter, because truthfully that is what is going to make us each accountable. It is not just about spending money and delivering on projects, it is about committing to the outcome of those projects and how those projects align. The City is actually just about to release its first ESG report (the first Canadian government) and again, doing it from a leadership perspective, to identify the baseline for accountability. And so Peter, the fact that you will be reporting out, and that we have to find standardized ways of reporting on ESG principals, that's the key! Globally, that is what is being discussed. The fact is that we can't emphasize enough how important the reporting aspect is. That is what is going to help hold each of the governments, whether you are Municipal, Provincial, or Federal – that is what is going to keep us accountable on delivering on the outcomes that those proceeds are intended for. So, I just had to jump in because I was super excited that you talked about that!

Kevin Martin, RBC: Yes, I would echo that. I think investors would certainly be very supportive of increased transparency in reporting on ESG. Naturally, as municipalities, you are all exposed to those types of capital projects (transit, social housing, water/wastewater infrastructure) that are very well aligned with ESG themes. So any increased focus on disclosure would be welcomed by investors. I wanted to turn the floor over to the other municipalities, City of St. John's, City of Montreal, York Region, we haven't seen a green or ESG issuance from yet. Would you care to comment on any future plans or what your views are on ESG generally?

Laura Mirabella, Regional Municipality of York: I think what we've heard today really epitomizes the debate that is ongoing, even internally at York Region. Potentially this sense that everything we do is green, so what is the value in changing our processes and incurring additional costs for reporting and creating a framework in order to issue a bond as a green bond? There are concerns around liquidity. But I think there is immense value for councils, and increasing value over time in really thinking about what we are trying to portray in terms of what we are investing in. What are the outcomes we are trying to achieve? I think having a green bond, or ESG bond program can really help with that over time. We don't have plans in the very short-term to issue something in the ESG world, but as we look forward to some of the bigger or transformational projects that we are planning in those areas, I think that those could be good candidates. For example, the Province announced, almost two years ago now, a major investment in expansion of the subway in to York Region and there will be a very large municipal share associated with that. I think it would be very hard to argue that it is not a green bond eligible project and it's incremental to our regular borrowing program, so it wouldn't impact the liquidity of our regular issues. That's probably a really great candidate, a few years out, but those are the kind of things that I am speaking to our council about over the next year or so.

Kevin Martin, RBC: Thanks very much, Laura. Mehdi let's go to you for your thoughts on ESG.

Mehdi Alani, City of Montreal: Montreal has not issue an ESG bond as of yet, but the move towards a greener city has been underway for quite some time now. Our bike paths are one of the largest in the world, almost 1,000 km overall. The City has also a lot of green projects, especially through the "Societe de Transport de Montreal". As an example, there is the extension of the subway blue line, the new subway cars, and also the purchasing of 400 electric buses. The problem is that these big projects that qualify for green bond issuances are subsidized at a rate of 70% by the Province, and actually I shouldn't say it's a problem! It's more "The beauty of it !"... However, it still causes a hurdle for us to have adequate size for a green bond issuance. Other projects, like water and waste water, are paid in cash and there are some technicalities which makes us have to pay them in cash. Also, in terms of the capital program, 70% of it is maintenance and upgrades, so it's tough to find big projects that are not subsidized and eligible for green bond issuance.

Kevin Martin, RBC: Very good point Mehdi. It is worth highlighting that both Province of Quebec and Province of Ontario have very substantial green bond programs in their own right, which help finance municipal transit projects as well. Derek, what is City of St John's view on ESG?

Derek Coffey, City of St. John's: To be fair, we might not be as far ahead as some of the other municipalities. We are certainly seeing a massive social demand and expectations of our tax payers that this is the new era people need to be living in and should expect. What we have talked about here internally is, the capital project that I mentioned earlier, which would be the largest one in our history. We are putting that on the radar for a green bond down the road once we get there. So, we haven't dug in to it immensely, but that's our plan to look in to it for that point in time.

Kevin Martin, RBC: That concludes our roundtable discussion. Thank you very much to each of our municipal treasurers for participating today and we wish you the best for 2021!

SELECT CANADIAN MUNICIPAL ISSUERS

	MONTREAL	MFABC	TORONTO	TRANSLINK	YORK
RATINGS	A(H) / Aa2 / AA-	Aaa / AAA	AA / Aa1 / AA	AA / Aa2	Aaa / AA+
TYPICAL ANNUAL BORROWING REQ. (C$ MM)	1,000-1,500	700-1,500	800-900	200-400	300-370
2020 DEBENTURE FUNDING	~C$1 billion	~C$1 billion	C$980 million	C$650 million	C$410 million
EXPECTED 2021 DEBT FUNDING	C$1.5 billion	C$2 billion	C$950 million	C$300 million	C$250 - 300 million
TYPICAL # ANNUAL ISSUES	4-5	2-3	3-4	1-2	2
TYPICAL MATURITIES	10-year, 20-year	5-year, 10-year	10-year, 20-year, 30-year	10-year, 20-year, 30-year	10-year, 20-year
PUBLIC DEBT OUTSTANDING (C$MM)	9,639	8,401	8,127	2,980	3,581
CREDIT STRENGTHS	• 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	• 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	• 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	• 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	• Diverse and growing economy supports increasing revenues • Provincial government imposes fiscal restraint through legislative requirements to pass balanced operating budgets • Typically generates large operating surpluses, propelled by rising population and assessment values • Debt has declined to pre-2011 levels and is expected to continue to decrease
REVENUE SOURCE	Taxes (65%), Services (21%), Transfers (7%), Quota shares from reconstituted municipalities (7%)[1]	Client Interest Payments (60%), Investment Income (34%), Financial Service Fees and Premium Amortizations (6%)[2]	Taxes (Prop., Land Transfer) (38%), Fed/Provincial Transfers (18%), Transit (10%), User Fees (7%)[3]	Taxes (47%), Transit (36%), Fed/Provincial Transfers (13%), Investment Income (3%)[5]	Tax Levy (48%), User Rates (19%), Grants and Subsidies (17%), Development Charge Reserve Draws (10%), Fees, Charges & Other Reserves (5%)[6]
OPERATING BUDGET	C$6.2 billion[1]	C$409 million[2]	C$13.53 billion[4]	C$2.02 billion[5]	C$2.5 billion[6]
CAPITAL EXPENDITURES	C$2.0 billion	n/a	C$1.0 billion	C$783.4 million[5]	C$826.3 million
EST. POPULATION[7]	1.7 million	n/a	2.8 million	n/a	1.2 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	Major regional municipality in Ontario, stretching from Toronto to Lake Simcoe

(1) Montreal Budget 2021 (2) MFABC Annual Report 2019 (3) Toronto Operating Budget Report 2020 (4) Toronto Operating Budget Report 2020
(5) TransLink 2020 Business Plan (6) York Region Budget Report 2020 (7) Statistics Canada Census Profile, 2016

SELECT RBC-LED TRANSACTIONS IN 2020

Select Transactions for Canadian Government Issuers & Asset Managers

CPP Investment Board
US$1,000,000,000
1.25% due 2025
AAA / Aaa / AAA
Joint Bookrunner
February 2020

Alberta
€1,100,000,000
0.50% due 2025
AA(L) / Aa2 / A+
Joint Bookrunner
April 2020

Ontario
C$3,600,000,000
2.05% due 2030
AA(L) / Aa3 / A+
Lead
April 2020

British Columbia
C$1,000,000,000
2.95% due 2050
AA(H) / Aaa / AAA
Lead
April 2020

Manitoba
C$800,000,000
2.45% due 2025
A(H) / Aa2 / A+
Joint Lead
April 2020

OMERS
C$1,250,000,000
1.55% due 2027
AAA / Aa1 / AA+
Joint Bookrunner
April 2020

CMHC SCHL
C$10,000,000,000
C$6 billion 2.35% due 2023
C$4 billion 1.75% due 2030
AAA / Aaa / AAA
Lead
May 2020

CDPQ
US$2,500,000,000
0.875% due 2025
AAA / Aaa / AAA
Joint Bookrunner
June 2020

Québec
US$3,250,000,000
0.60% due 2025
AA(L) / Aa2 / AA-
Joint Bookrunner
July 2020

PSP Investissements Investments
C$1,500,000,000
0.90% due 2026
AAA / Aaa / AAA
Joint Bookrunner
August 2020

York Region
C$250,000,000
1.70% due 2030
- / Aaa / AA+
Lead
August 2020

Nova Scotia
C$300,000,000
3.15% due 2051
A(H) / Aa2 / AA-
Lead
September 2020

St. John's Newfoundland and Labrador, Canada
C$138,000,000
2.916% due 2040
- / A1 / A+
Sole Lead
August 2020

Northwest Territories
C$180,000,000
2.20% due 2051
Inaugural Debt Offering
- / Aa1 / -
Sole Bookrunner
September 2020

Ontario Teachers' Pension Plan
C$1,250,000,000
1.10% due 2027
Inaugural Debt Offering
AAA / Aa1 / AA+
Joint Bookrunner
October 2020

Ontario
€2,500,000,000
0.01% due 2030
AA(L) / Aa3 / A+
Joint Bookrunner
November 2020

Green Bonds and Sustainable Finance

European Investment Bank Group
C$500,000,000
1.90% due 2025
AAA / Aaa / AAA
Joint Bookrunner
January 2020

Québec
C$500,000,000
1.85% Green Bond due 2027
AA(L) / Aa2 / AA-
Joint Bookrunner
February 2020

Ottawa
C$300,000,000
2.50% Green Bond due 2051
- / Aaa / AA
Joint Bookrunner
May 2020

Toronto
C$100,000,000
1.60% Social Bond due 2030
AA / Aa1 / AA
Joint Bookrunner
June 2020

Ontario
C$1,500,000,000
1.85% Green Bond due 2027
AA(L) / Aa3 / A+
Joint Bookrunner
October 2020

Toronto
C$130,000,000
2.60% Green Bond due 2039
AA / Aa1 / AA
Lead
December 2020

Maple Offerings

The World Bank
C$1,500,000,000
1.90% due 2025
AAA / Aaa / AAA
Joint Bookrunner
January 2020

IDB Inter-American Development Bank
C$600,000,000
0.75% due 2025
- / Aaa / AAA
Joint Bookrunner
August 2020

European Investment Bank Group
C$600,000,000
1.75% due 2024
AAA / Aaa / AAA
Joint Bookrunner
September 2020