Investments

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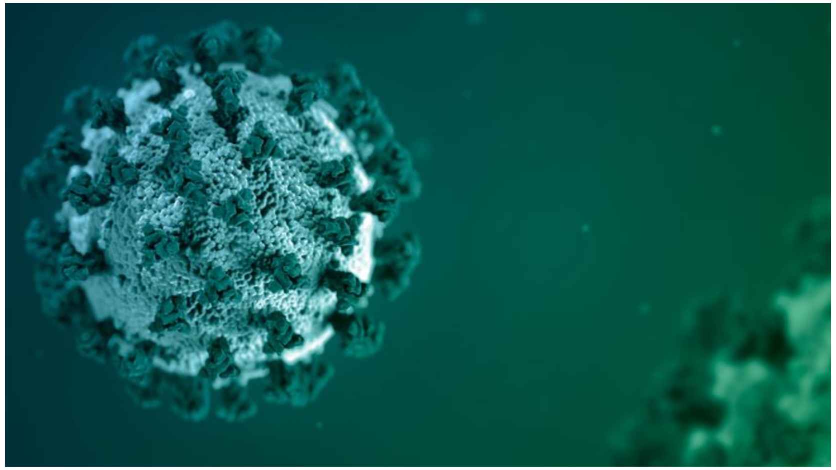
Agenda

1) COVID-19 & Portfolio Performance
2) Investment Objectives
3) Actual Asset Allocation vs. Target
4) ALM Implementation Update
5) Interest Rate Forecast
6) Shadow Portfolios

COVID-19

- On March 11, 2020 the World Health Organization declared a global pandemic related to Covid-19. The financial markets have been negatively impacted by Covid-19, which has resulted in significant economic uncertainty.



Actual vs. Benchmark Returns

All portfolios matched or outperformed their benchmarks over the 12 months ended at March 31, 2020

	Basic Claims*	RSR	EFB
Portfolio	4.4%	-0.1%	0.3%
Transitional Benchmark	4.4%	-0.6%	-0.4%
Value Added	0.0%	0.5%	0.7%

*MUSH bond returns calculated using implied market values

Impact on Public Equity Portfolio

Impact on Equity Portfolio

Equity markets declined sharply in March 2020 due to Covid-19.

Write-downs

At March 31, 2020 the corporation incurred a net write-down of $54.4 million[1] to its public equity portfolio[2].

- MPI's public equity portfolio was down 17.7% since it peaked on February 20 and down 14.5% since December 31.

Recovery

Since the TSX reached a low on March 23 equity markets have staged an impressive recovery.

- From March 23 to August 31 MPI's public equity portfolio increased by 34.5%.
- 5.5% decline since 2/20/2020, 1.7% decline since 12/31/2019.
- Fiscal YTD (March 31 – August 31) the portfolio has increased 16.6%.

[1] the amount by which the book value exceeded the market value of the equity portfolio
[2] Canadian, global and global low volatility equities

Impact on Private Equity Portfolio

Impact on Private Equity Portfolio

MPI's real estate and infrastructure investments were less impacted by Covid-19 than publicly listed equities for the following reasons:

- The assets are less economically sensitive[1].
- Difficult to accurately forecast asset impact of the pandemic; cash flows were revised.
- Private assets are also valued infrequently (appear less volatile).

Over the 3 months ended at March 31, 2020:

- Infrastructure portfolio increased by 1.2%.
- Pooled real estate fund increased by 1.6%.

Fiscal YTD ending at August 31, 2020:

- Infrastructure portfolio increased by 2.7%.
- Real estate portfolio decreased by 1.8%.

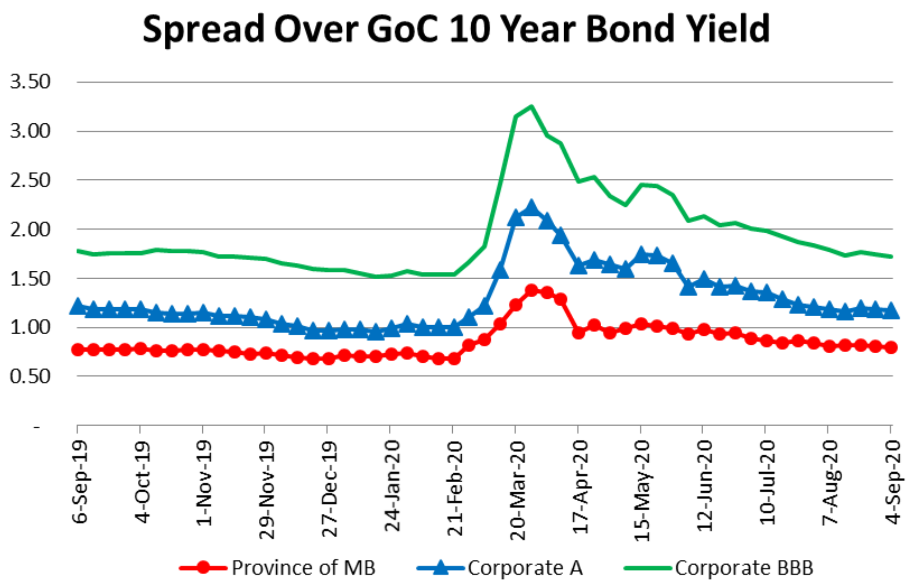
[1] generally having long-term contracted or regulated revenue streams that are less impacted by short-term changes in demand or usage.

Impact on Fixed Income Portfolio

Impact on Fixed Income Portfolio

Due to Covid-19:

- Corporate and Provincial bond spreads widened substantially from December 31, 2019 to March 31, 2020.
- Bond spreads narrowed considerably by August 31.
- The net impact on the absolute level of corporate and provincial bond yields was mixed.
- The graph depicts the yield of corporate bonds rated "A" and "BBB" and Province of Manitoba bonds relative to the yield of the Government of Canada 10 year bond.



Impact on Fixed Income Portfolio Cont'd

Bond Spreads

Government of Canada 10 Year, Corporate and Provincial Bond Yields:

Bond Type	Yield at March 31, 2020	Yield at August 31, 2020	Change
Corporate BBB	3.93%	2.33%	-1.60%
Corporate A	3.05%	1.84%	-1.21%
Provincial	2.04%	1.46%	-0.56%
GCAN 10 Year	0.70%	0.62%	-0.08%

Source: FTSE Russell-Debt Market Indices

Impact on Fixed Income Portfolio Cont'd

MPI's Public Fixed Income Portfolio

From December 31 to March 31:

- The yield on the corporation's corporate bond portfolio increased by 32 bps.
- The market value of MPI's corporate bonds (across all portfolios) fell by $34.8 million.
- The yield on the corporation's provincial bond portfolio fell by 19 bps.
- The market value of MPI's provincial bonds increased by $6.3 million.

From March 31 to August 31:

- The yield on the corporation's corporate bond portfolio decreased by 79 bps.
- The market value of MPI's corporate bonds (across all portfolios) increased by $73.5 million.
- The yield on the corporation's provincial bond portfolio fell by 69 bps.
- The market value of MPI's provincial bonds increased by $79.6 million.

Impact on Fixed Income Portfolio Cont'd

MPI's Private Fixed Income Portfolio

From December 31 to March 31:

- The yield on the mid-duration private debt fund increased by 21 bps.
- The yield on the long-duration private debt fund increased by 12 bps.
- The total market value fell by $4.2 million.

From March 31 to August 31:

- The yield on the mid-duration private debt fund decreased by 80 bps.
- The yield on the long-duration private debt fund decreased by 71 bps.
- The total market value increased by $20.6 million.

Impact to the Forecast

Impact on Forecasts

Public Equity

The equity market decline in March 2020 does not change the forecasted return for equities.

- Because the forecast is based on the long-term historical average return for the asset class.
- Starting values in the financial model reflect the reduced market values at March 31, 2020.

Private Equity

- Real estate and infrastructure returns are somewhat affected by Covid-19.
- forecasts are based on forecasted inflation plus a fixed spread of 4% and 5% respectively.

Fixed Income

The forecast of bond yields is based on two components: (1) GoC 10 year bond yield and (2) spreads.

- The forecast of the GoC 10 year bond yield is based on the actual yield[1] at March 31st.
- The forecasted spreads are based on actual spreads[2] at March 31st.

[1] which is 124 bps lower than the yield at February 28, 2019 (0.70% vs. 1.94%)
[2] which is 78 bps higher than the spreads in the 2020 GRA (190 bps vs. 112 bps)

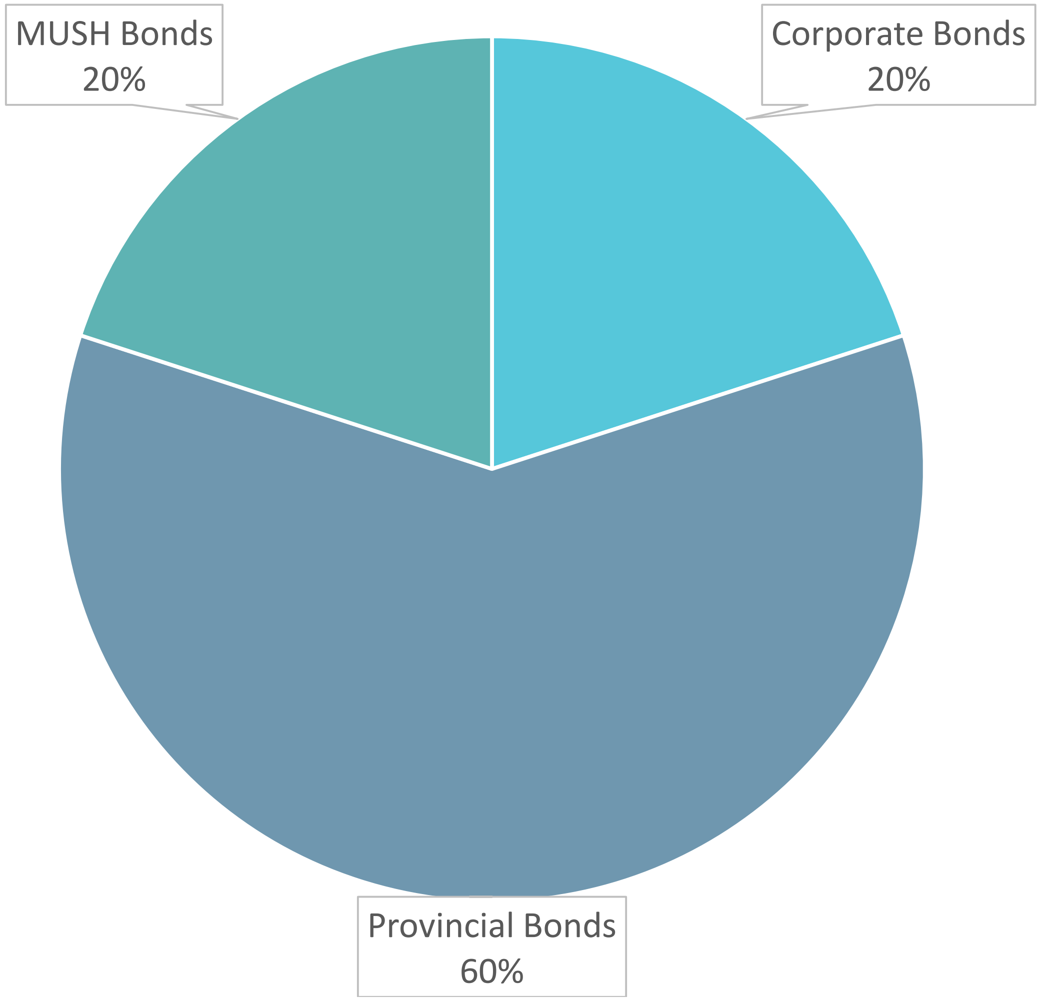
Investment Objectives

Investment Objectives of MPI's Board and Government

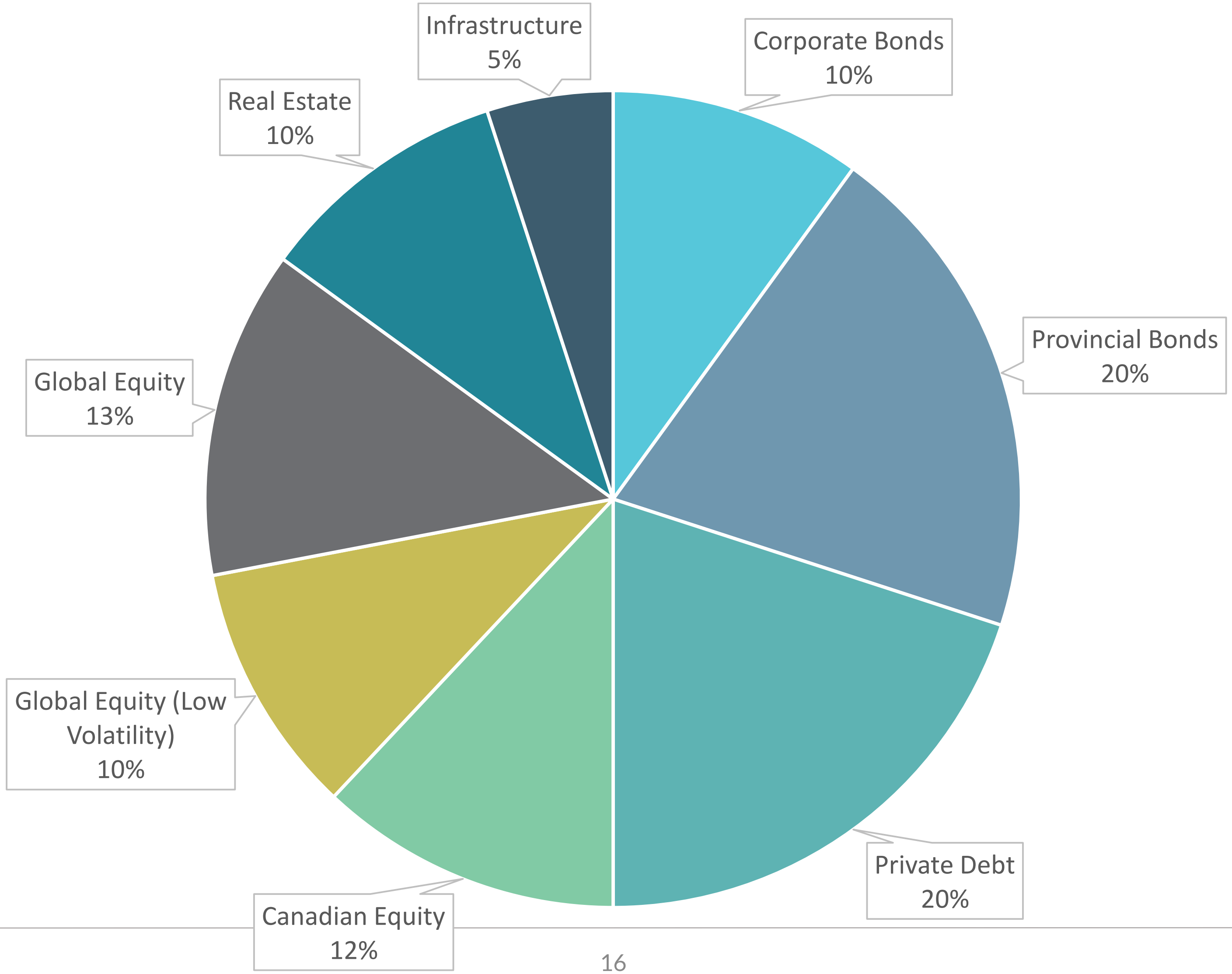
- Reduced premium/rate volatility.
- Directly match investments to liabilities.
- Ensure that capital is available to pay claims when necessary.
- Appropriate levels of risk for each portfolio driven by the purpose of each portfolio (as set out in the IPS and determined by the Board).

Actual vs. Target Asset Allocation

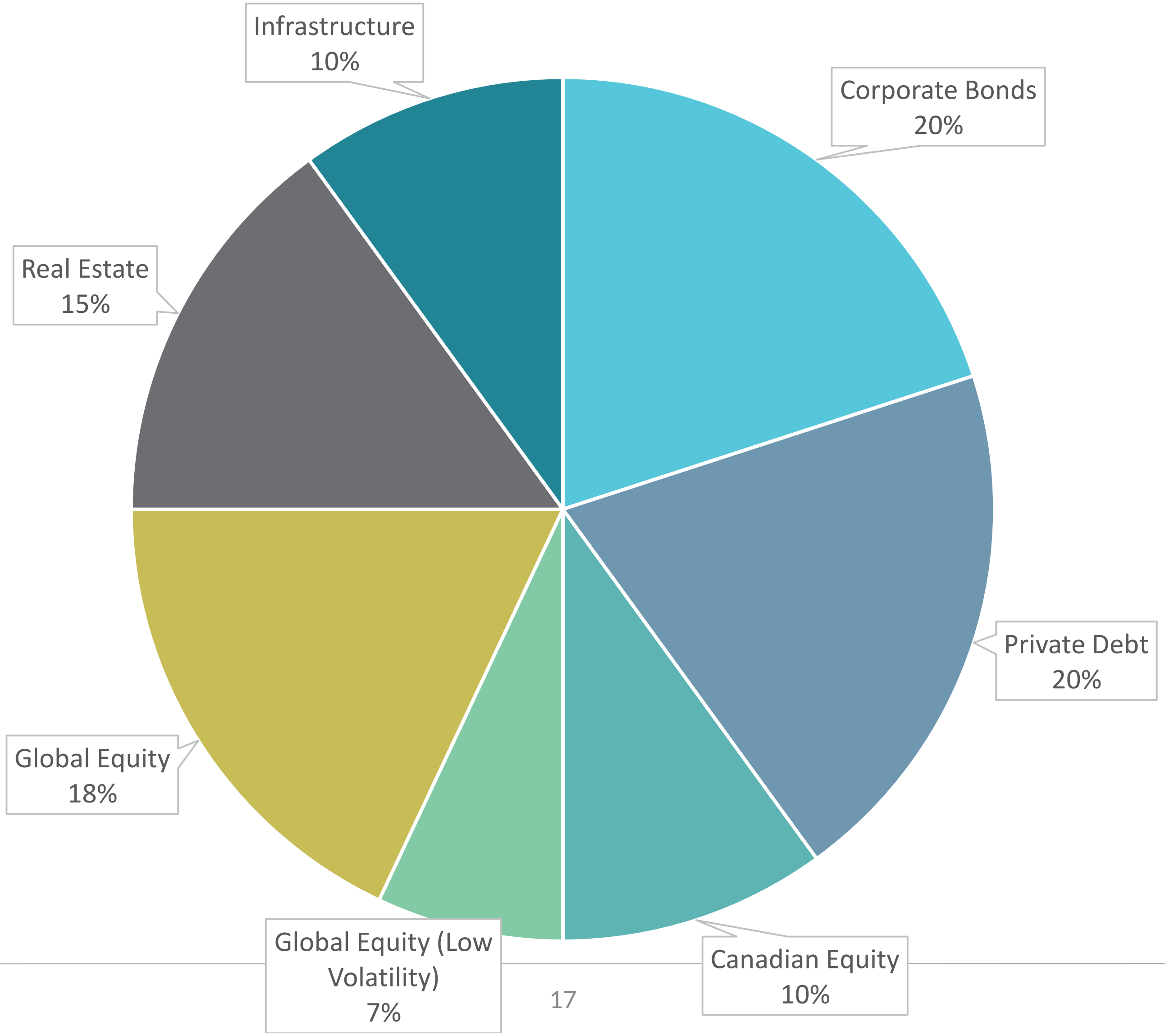
Basic Claims Target Asset Mix



RSR Target Asset Mix



EFB Target Asset Mix



Actual Asset Mix at September 30, 2020

Sep-20

(in $ Million)		Consolidated MV + AI	Total current	Basic current	RSR current	SRE current	EXT current	EFB current
Cash, Short Term, & FRNs	**$**	**183.9**	**5.1%**	**3.0%**	**17.8%**	**9.7%**	**4.9%**	**0.6%**
Fixed Income								
Provincial Bonds	$	1,353.6	37.9%	53.6%	19.7%	19.5%	17.4%	
Corporate Bonds		607.7	17.0%	19.4%	9.6%	9.2%	9.6%	19.4%
Non-Marketable Bonds (***)		530.3	14.8%	23.9%				
Private Debt		154.7	4.3%		5.8%	8.3%	8.8%	19.0%
Total Debt	**$**	**2,646.4**	**74.1%**	**97.0%**	**35.1%**	**37.0%**	**35.9%**	**38.3%**
Public Equities								
Canadian		138.9	3.9%	0.0%	11.5%	11.5%	12.3%	7.8%
Global		225.4	6.3%	0.0%	15.9%	13.6%	15.6%	18.9%
Global Low Vol		105.1	2.9%	0.0%	7.7%	8.6%	11.1%	6.3%
Total Public Equities	**$**	**469.4**	**13.1%**	**0.0%**	**35.1%**	**33.8%**	**38.9%**	**33.1%**
Alternative Investments								
Canadian Real Estate (*)	$	163.8	4.6%	0.0%	8.2%	13.2%	13.8%	14.7%
Venture Capital		0.3	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%
Infrastructure (**)		109.0	3.1%	0.0%	3.8%	6.2%	6.5%	13.3%
Total Alternative Investments	**$**	**273.1**	**7.6%**	**0.0%**	**12.0%**	**19.5%**	**20.3%**	**28.0%**
Total Assets:	**$**	**3,572.8**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

(*) CityPlace at appraised value
(**) Infrastructure based on latest valuations from fund managers
(***) MUSH at book value

ALM Implementation Update

October 2020

Implementation Update

- All asset classes are fully funded except for private debt as we are awaiting capital calls from the investment manager.

- Real estate and infrastructure remain slightly overweight.

ALM Strategy – Impact of Interest Rates

The net impact of changes in interest rates from March 31, 2020 – August 31, 2020 on a Corporate wide basis has been $8.3 million worse than budget on total fixed income assets of $2,753 million.

	Millions
Gain on Marketable Bonds	$127.4
Increase in Claims Incurred due to Discount Rate Change	$140.1
Net Impact of Interest Rate Changes	($12.7)
Budget	($4.4)
Actual Impact vs. Budget	($8.3)

Interest Rate Forecast

August 2020

The Important of Accurate Interest Rate Forecasts

- Interest rates are one of the key inputs into our financial model, which is used to forecast our revenues and expenses and used to determine the rate indication for our application (i.e., premiums charged to customers in the next rating year).
- Using an accurate forecast of future interest rates ensures that customers are charged the correct premium.
- Updating our forecasts with interest rates as of August 31, 2020 reduces the time between making the forecast and beginning to charge the new rates to customers on April 1, 2021, resulting in a more accurate forecast.
- Using Accepted Actuarial Practice (AAP) also reduces the impact of interest rates on premiums charged to customers.

Rationale for Naïve Interest Rate

MPI's goal is to reduce pricing risk by using the most accurate forecast

- A "Naïve" forecast simply uses today's actual interest rate as the forecast of future interest rates.
- Naïve interest rate provides a neutral, unbiased forecast.
  - Going forward, the GoC 10 year bond could increase, decrease or remain flat
  - Naïve Forecast is a better predictor than the 50/50 or SIRF methodologies
- Over the short term (1 to 1.5 years), the Bank of Canada overnight rate is not reliably predictive of the direction and magnitude of movements in the GoC 10 year bond rate.

Shadow Portfolios

March 2020

Shadow Portfolios

- Four shadow portfolios were developed with assistance from Mercer and input from the PUB and its advisors in accordance with PUB orders 11.17 and 11.19 in May 2019.
- 2 portfolios for Basic Claims and 2 for Employee Future Benefits.
- The portfolios contain allocations to MPI's existing asset classes, plus real return bonds (RRBs) and private equity and also include the use of leverage (borrowing to invest).
- An assumption regarding the impact of the "J-Curve" on private asset classes was added.

Conclusion

- Unique investment strategies are better aligned to the purpose and characteristics of the associated liabilities.
- Volatility of the Basic Claims portfolio has been reduced.
- The expected reduction in investment risk will have a positive impact on MPI’s required capital.
- The new investment strategy is almost fully implemented, with the exception of private debt.