



# Claims, Ratemaking, Capital Management Plan

Luke Johnston, FCIA Chief Actuary and Vice President, Product and Risk Management

Tai Phoa, Manager, Pricing

Curtis Wennberg, VP, Customer Service & COO



# Claims Forecast

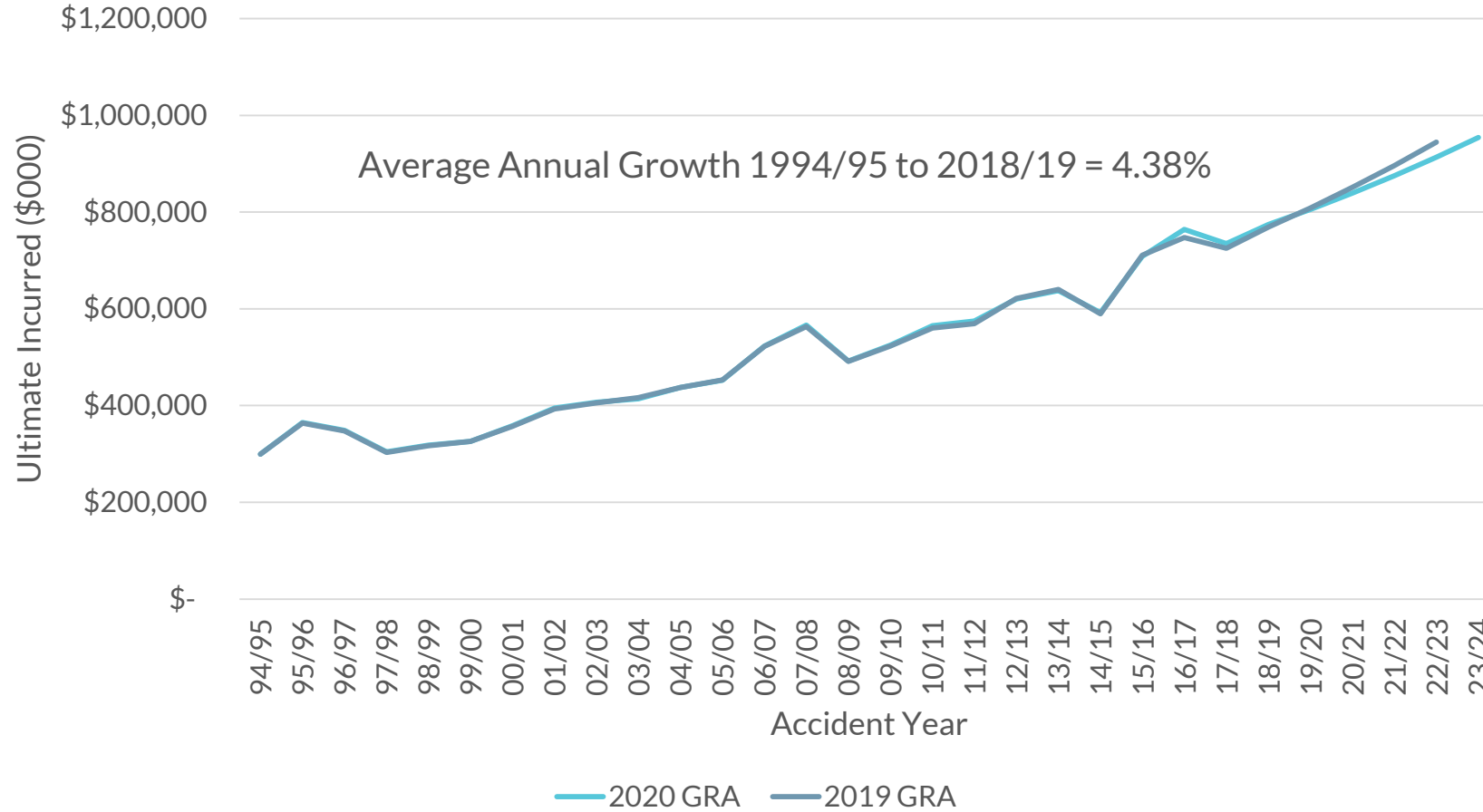


# Basic Total - Ultimate Losses

Accident Year	Ultimate (\$000)	Annual % Change	Last Year's Forecast (\$000)	Variance to Forecast (\$000)
2014/15	\$591,849	-7.21%	\$589,944	\$1,906
2015/16	\$708,443	19.70%	\$710,586	(\$2,143)
2016/17	\$764,360	7.89%	\$747,599	\$16,761
2017/18	\$734,503	-3.91%	\$725,014	\$9,490
2018/19	\$774,460	5.44%	\$768,995	\$5,464
2019/20	\$805,662	4.03%	\$808,678	(\$3,016)
2020/21	\$838,786	4.11%	\$851,029	(\$12,244)
2021/22	\$875,249	4.35%	\$896,226	(\$20,977)
2022/23	\$913,681	4.39%	\$944,409	(\$30,728)
2023/24	\$954,127	4.43%		



# Basic Total – Ultimate Losses



# Provincial Sales Tax (PST) Reduction

- The PST was reduced from 8% to 7% on July 1, 2019
- The cumulative reduction in the claims forecast from the lowering of the PST is \$5.9 million in 2020/21, which is equivalent to a permanent 0.5% rate reduction all else equal.
- The PST reduction is allocated completely and proportionally to Collision and Comprehensive coverage.



# Weekly Indemnity – Ultimate Losses

Accident Year	Claim Count Incurred >\$0	Severity	Ultimate (\$000)	Annual % Change	Last Year's Forecast (\$000)	Variance to Forecast (\$000)
2009/10	1,878	\$37,094	\$69,662	-3.57%	\$66,966	\$2,696
2010/11	1,929	\$46,689	\$90,063	29.28%	\$85,539	\$4,524
2011/12	1,833	\$47,311	\$86,721	-3.71%	\$82,795	\$3,926
2012/13	2,026	\$45,020	\$91,204	5.17%	\$93,615	(\$2,411)
2013/14	1,896	\$41,303	\$78,303	-14.15%	\$78,636	(\$333)
2014/15	1,663	\$42,859	\$71,262	-8.99%	\$66,523	\$4,738
2015/16	1,813	\$47,390	\$85,921	20.57%	\$85,048	\$873
2016/17	1,810	\$46,844	\$84,775	-1.33%	\$81,912	\$2,864
2017/18	1,915	\$45,102	\$86,374	1.89%	\$76,173	\$10,201
2018/19	1,837	\$48,572	\$89,213	3.29%	\$76,840	\$12,373
2019/20	1,809	\$45,584	\$82,460	-7.57%	\$76,953	\$5,507
2020/21	1,800	\$46,263	\$83,294	1.01%	\$77,046	\$6,248
2021/22	1,792	\$46,952	\$84,134	1.01%	\$77,119	\$7,015
2022/23	1,783	\$47,652	\$84,981	1.01%	\$77,171	\$7,810
2023/24	1,775	\$48,362	\$85,834	1.00%		



# Weekly Indemnity – More Lifetime Claimants

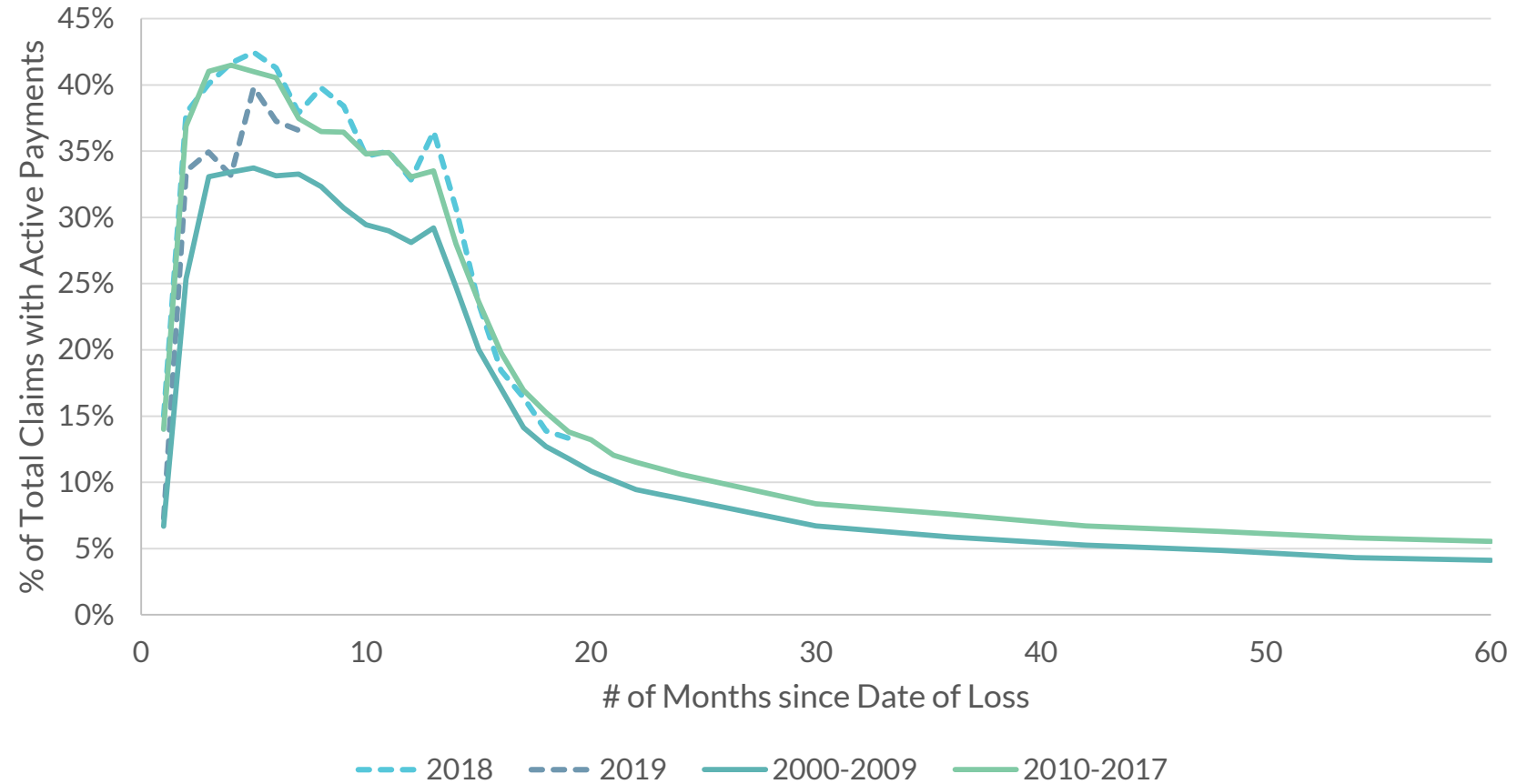
- The significant increase in Weekly Indemnity severity post 2009/10 has largely been driven by an increase in the number of long duration claimants.

Accident Year	Active Claims at 60 Months	5 Year Rolling Average	% of Total IRI Claims	5 Year Rolling Average	Average Severity of Active Claims at 60 Months
2004/05	73	73.2	3.58%	3.36%	\$365,956
2005/06	80	71.4	4.12%	3.42%	\$431,530
2006/07	94	76.2	4.47%	3.68%	\$490,730
2007/08	105	84.4	5.12%	4.12%	\$490,344
2008/09	106	91.6	5.63%	4.58%	\$461,285
2009/10	95	96.0	5.06%	4.88%	\$467,749
2010/11	109	101.8	5.65%	5.19%	\$554,661
2011/12	97	102.4	5.29%	5.35%	\$564,492
2012/13	126	106.6	6.22%	5.57%	\$491,209
2013/14	106	106.6	5.59%	5.56%	\$456,463
2014/15	77	103.0	4.63%	5.48%	\$626,351
2015/16	107	102.6	5.90%	5.53%	\$574,029



# Weekly Indemnity – Some Improvement

- There is a clear difference in the persistence of WI claims before and after 2010.
- Recent changes to the Injury Claims Unit appear to be having a favourable impact. However, it is too early to fully incorporate these results into forecasts.





# Accident Benefits Other – Indexed

Accident Year	Claim Count Incurred >\$0	Severity	Ultimate (\$000)	Annual % Change	Last Year's Forecast (\$000)	Variance to Forecast (\$000)
2009/10	11,239	\$5,292	\$59,480	9.16%	\$60,171	(\$691)
2010/11	11,840	\$4,592	\$54,371	-8.59%	\$54,166	\$206
2011/12	11,252	\$5,549	\$62,444	14.85%	\$61,460	\$984
2012/13	12,129	\$5,255	\$63,734	2.07%	\$63,565	\$169
2013/14	12,361	\$4,397	\$54,359	-14.71%	\$55,811	(\$1,453)
2014/15	10,715	\$4,890	\$52,393	-3.62%	\$54,637	(\$2,244)
2015/16	11,629	\$5,679	\$66,035	26.04%	\$69,580	(\$3,545)
2016/17	11,667	\$6,671	\$77,834	17.87%	\$69,406	\$8,428
2017/18	11,897	\$6,142	\$73,067	-6.12%	\$69,638	\$3,429
2018/19	11,139	\$6,623	\$73,771	0.96%	\$63,849	\$9,922
2019/20	11,803	\$6,295	\$74,302	0.72%	\$64,567	\$9,735
2020/21	11,827	\$6,373	\$75,373	1.44%	\$65,294	\$10,079
2021/22	11,852	\$6,451	\$76,458	1.44%	\$66,028	\$10,430
2022/23	11,876	\$6,531	\$77,559	1.44%	\$66,770	\$10,789
2023/24	11,900	\$6,611	\$78,675	1.44%		



# Centralized Reserving

- A centralized reserving team case reserves all PIPP claims that are open for 24 months or longer.
- For Weekly Indemnity, the calculation of a lifetime case reserve is simplified because of the determined entitlement to income replacement.
- For coverages such as personal care, medical, or other lifetime reoccurring benefits the amount of the lifetime benefit is more uncertain.
- MPI began centralized reserving on non-WI covers in 2018 and the result was a significant increase in case reserves. MPI will monitor the development of these reserve estimates and modify the initial reserve based on experience.



# PIPP – 2019/20 Restated Forecast as of August 31, 2019

- 2019/20 Fiscal PIPP reported claims incurred was \$24.1 M or 22.3% under budget as of August 31, 2019
- Given the high uncertainty of PIPP claims and the pending October 31, 2019 actuarial valuation results, MPI has 'booked to budget' PIPP claims in the 2019/20 fiscal update.
- In other words, MPI has added back IBNR in the 2019/20 PIPP forecast to exactly offset the favourable YTD results.



# Collision

Accident Year	Claim Frequency	Severity	Ultimate (\$000)	Annual % Change	Last Year's Forecast (\$000)	Variance to Forecast (\$000)
2009/10	0.127	\$2,510	\$242,490	0.31%	\$242,510	(\$20)
2010/11	0.137	\$2,552	\$271,224	11.85%	\$271,184	\$40
2011/12	0.128	\$2,699	\$273,155	0.71%	\$273,139	\$16
2012/13	0.136	\$2,812	\$310,691	13.74%	\$310,634	\$57
2013/14	0.142	\$2,983	\$349,350	12.44%	\$349,215	\$135
2014/15	0.122	\$3,123	\$317,689	-9.06%	\$317,797	(\$109)
2015/16	0.120	\$3,456	\$352,243	10.88%	\$352,355	(\$112)
2016/17	0.125	\$3,575	\$385,820	9.53%	\$386,123	(\$302)
2017/18	0.125	\$3,752	\$408,218	5.81%	\$414,398	(\$6,180)
2018/19	0.118	\$3,881	\$405,314	-0.71%	\$438,325	(\$33,011)
2019/20	0.122	\$4,141	\$452,857	11.73%	\$469,244	(\$16,387)
2020/21	0.122	\$4,320	\$477,312	5.40%	\$502,411	(\$25,098)
2021/22	0.121	\$4,516	\$504,207	5.63%	\$537,993	(\$33,786)
2022/23	0.121	\$4,721	\$532,673	5.65%	\$576,172	(\$43,499)
2023/24	0.121	\$4,936	\$562,803	5.66%		



# Collision - Frequency vs Severity Growth

## Ultimate Collision Frequency

## Ultimate Collision Severity Growth

Accident Year	Actual*	2019 GRA	2020 GRA	Actual*	2019 GRA	2020 GRA
2014/15	0.122	0.122	0.122	4.69%	4.80%	4.70%
2015/16	0.120	0.120	0.120	10.65%	10.62%	10.67%
2016/17	0.125	0.125	0.125	3.45%	3.40%	3.44%
2017/18	0.124	0.125	0.125	5.21%	5.95%	4.96%
2018/19	0.122	0.125	0.118	1.45%	4.17%	3.42%
2019/20	0.116	0.125	0.122	6.44%	5.42%	6.71%
2020/21		0.125	0.122		5.43%	4.31%
2021/22		0.126	0.121		5.43%	4.54%

\* Estimated as of August 31, 2019. Actual results have also been updated through August 31, 2019 for all years.



# Light Vehicle Accreditation Agreement (LVAA)

- As part of the LVAA agreement, the Direct Repair (DR) premium of \$81 was eliminated on April 15, 2019.
- The \$81 premium was not included in cost of Collision claims, but rather as an unallocated claims costs (ULAE). (i.e. the impact did not show up in the collision severity figures). The cost of the DR premium was first added to ULAE the 2019 GRA.
- Removal of the DR premium resulted in an approximately \$6.0 million per year reduction in ULAE in the rating period.
- If the \$6.0 million DR recovery is removed from the Collision forecast, then the restated projected severity growth falls from 6.7% to 5.2%, which is a more reasonable severity growth rate.



# Basic Claims Costs – 2019/20 Restated Forecast as of August 31, 2019

	Q2 Actual	Budget	Diff B(W)	Remaining forecast*	Remaining Budget	Diff B(W)	2019/20 Forecast*
<b><u>Claims Category</u></b>							
<b>PIPP</b>	108.3	121.5	13.2	179.7	154.1	(25.6)	288.0
<b>Collision</b>	189.8	202.7	12.9	286.5	314.7	28.2	476.3
<b>Comprehensive</b>	42.4	60.9	18.5	37.4	50.0	12.6	79.8
<b>Other/DPAC</b>	18.5	21.6	3.1	18.7	34.1	15.5	37.2
<b>Total Direct Claims Incurred</b>	359.0	406.7	47.7	522.3	552.9	30.7	881.3
<b>Interest Rate Impacts</b>	94.0	(35.5)	(129.5)	0.9	5.9	5.0	94.9
<b>TOTAL</b>	<b>453.0</b>	<b>371.2</b>	<b>(81.8)</b>	<b>523.2</b>	<b>558.8</b>	<b>35.6</b>	<b>976.2</b>

\*Forecast to March 31, 2020



# Ratemaking





# Agenda

- **Ratemaking**
  - Done on a breakeven basis based on Accepted Actuarial Practice
  - 2020/21 breakeven rate indication is -0.6%
  - No capital build or capital release provision
- **Change in fiscal year end**



# Basic Rates

- The Basic ratemaking methodology is proven and stable over time.
- Required rates are determined on a breakeven basis i.e. no profit provision, and based on Accepted Actuarial Practice
- A capital build or capital release provision is included thereafter if applicable based on MPI's Capital Management Plan



# Basic Rates

- MPI continues to operate in a fiscally prudent manner to keep rate asks to a minimum. Compared to the 2019 GRA:
  - Claims costs per vehicle unit increased by only 2%, which is less than natural premium upgrade of 2.5%
  - Claims and operating expenses per vehicle unit increased marginally by 0.3%
- 2020/21 breakeven rate indication = -0.6%
- No capital build or capital release provision



# Breakeven Rate Indication

- The table to the right compares the undiscounted costs per vehicle for the components making up the overall required rate.

Components	2019 Undiscounted AAP Rates, \$	2020 Undiscounted AAP Rates, \$	\$ Change/ Impact on AAP Rates	% Change	\$ Change as % of 2019 AAP Required Rate
Claims	768.57	783.68	15.10	2.0%	1.7%
Claims Expense	123.29	124.43	1.14	0.9%	0.1%
Road Safety/Loss Prevention	10.63	11.11	0.48	4.5%	0.1%
Operating Expense	62.48	61.83	(0.65)	-1.0%	-0.1%
Regulatory Appeal	4.10	4.41	0.31	7.5%	0.0%
Commission	39.39	40.40	1.01	2.6%	0.1%
Premium Tax	31.29	31.85	0.56	1.8%	0.1%
Reinsurance	9.61	12.05	2.44	25.3%	0.3%
Fleet Rebates	13.46	14.31	0.85	6.3%	0.1%
Anti-Theft Discount	1.97	1.72	(0.25)	-12.6%	0.0%
Driver Premium	(59.09)	(59.74)	(0.65)	1.1%	-0.1%
Service Fees	(21.90)	(24.25)	(2.35)	10.7%	-0.3%
Total Undiscounted	983.80	1,001.80	18.00	1.8%	2.0%
Impact of Discounting	(85.46)	(73.50)	11.96	-14.0%	1.3%
Required Rate	898.34	928.29	29.95	3.3%	3.3%
Natural Upgrade (Difference in forecasted upgrade plus upgrade for one additional year)					-2.5%
18/19 Volume Below Forecast					0.7%
Reversal of Capital Maintenance Provision					-2.1%
AAP/Breakeven Rate Indication					<b>-0.6%</b>



# Drivers behind 2020/21 Rate Change

## 2020/21 Basic Rate Indication

Required Rate*	+3.3%
Vehicle Upgrade	-2.5%
Vehicle Volume	+0.7%
Reverse Capital Maintenance Provision	-2.1%
<b>AAP/Breakeven Required Rate Change</b>	<b>-0.6%</b>

\*Required rate increased by 3.3% from 2019 GRA:

- Claims Costs (including Claims Expense) = +1.8%
- Decrease in Interest Rates = +1.3%
- Reinsurance Costs = +0.3%
- All Other Expenses = +0.2%
- Service Fee and Driver Premium Revenues = -0.3%



# 0.6% Vehicle Premium Rate Decrease

- Approximately 82% of overall vehicles have a rate change of less than +\$50
  - Approximately 77% of private passenger vehicles

<b>Major Class</b>	<b>Current Average Rate</b>	<b>Indicated Average Rate</b>	<b>Indicated Rate Change</b>
<b>Private Passenger</b>	\$1,164	\$1,154	-0.9%
<b>Commercial</b>	\$809	\$814	0.7%
<b>Public</b>	\$1,928	\$2,128	10.4%
<b>Motorcycles</b>	\$810	\$851	5.1%
<b>Trailers</b>	\$79	\$75	-5.2%
<b>Off-Road Vehicles</b>	\$8	\$7	-12.5%
<b>Overall</b>	\$890	\$885	-0.6%



# Rate Change – Public Major Class

- 2020 rates – Based on the observed loss costs, removed expectation that the loss costs for Taxi VFH will decrease by \$1M
  - 2019 rates – includes expectation that driver behavior will improve due to eligibility for DSR discount
  - Comparison of Collision loss experience for the first 7 months
- Other drivers of the rate increase – increase in forecasted overall claims costs and low upgrade factor

Loss Yr	Incurred
2015	\$1,131,406
2016	\$1,240,531
2017	\$1,180,693
2018	\$1,327,580
2019	\$1,304,595



# Rate Change - Motorcycle Major Class

- Rate change disproportionately affected by changes in the new money yield (NMY) used for ratemaking.
- Significant proportion of loss costs are for long-tail PIPP benefits
- Other drivers of the rate increase – increase in forecasted overall claims costs and low upgrade factor

	Private Passenger	Motorcycles
PIPP % of total loss costs	29%	91%
Required rate change @ NMY of 3.40%	-2.9%	0.2%
Required rate change @ NMY of 2.50%	-0.9%	5.1%
Variance from the change in NMY	2.0%	4.9%





# Change in Fiscal Year End

- Change in fiscal year-end means that 2020/21 rates will be in effect for a 13-month period from March 1, 2020 to March 31, 2021
- Customers renewing their policies in March 2021 will see no change in their premiums over the prior year

- Comparing two customers:

Renewal in March		Renewal in April	
March 2020	2020 Rates	April 2020	2020 Rates
March 2021	2020 Rates	April 2021	2021 Rates
March 2022	2021 Rates	April 2022	2022 Rates

- Customers with March renewals will be affected by future PUB approved rate changes one year later than they are currently



# Summary of Key Themes

- Proven process
- Resulting in -0.6% breakeven indication based on AAP
- No capital build or capital release provision



# Capital Management Plan (CMP)



# Purpose of the Rate Stabilization Reserve (RSR)

Purpose of the RSR:

*To protect motorists from rate increases that would otherwise have been necessary due to unexpected variances from forecasted results and due to events and losses arising from non-recurring events or factors*

MPI's proposed Capital Management Plan is *always* managing rate volatility by taking predetermined steps toward the Basic 100% MCT target in every application and capping rate surcharges at +5%.

# Purpose of the Rate Stabilization Reserve (RSR)

- [insert description]
- The Reserves Regulation will hopefully bring an end to decades of debate on MPI's capital targets.
- MPI is following industry best practice in its use of the MCT. The selected Basic capital target of 100% MCT is the absolute minimum target for any P&C insurer in Canada. The target is not excessive.
- All Basic RSR funds remain in the Basic line of business.



# Capital Management Plan

- One simple methodology to:
  1. Achieve the purpose of the Rate Stabilization Reserve
  2. Adjust RSR toward the Basic 100% MCT requirement in a structured and consistent manner from year-to-year
- The Capital Management Plan eliminates the requirement to have separate adjustments for investment income on the RSR, capital maintenance, one-time surcharges, and rebate cheques. All of these adjustments are rolled into one Capital Build or Release provision.



# Components of the Capital Management Plan (CMP)

- Accepted Actuarial Practice (AAP) Ratemaking
- Capital Targets by Line of Business
- Capital Transfer Rules
- Capital Build or Release Provisions



# Accepted Actuarial Practice

- No changes proposed to MPI's break-even rate setting methodology, which follows Accepted Actuarial Practice (AAP).
- Investment Income on the RSR should not be included in the AAP break-even rate.
- Investment Income on a RSR is a capital adjustment and is now embedded in the overall capital build/release provision.





# Capital Transfers

- Transfers are now assumed to occur automatically when Extension the actual Extension Minimum Capital Test ratio > 200% at fiscal year end.
- Unlike past years GRA's, Extension capital transfers are now forecasted as part of the GRA.
- Capital transfers reduce or eliminate the requirement for capital maintenance and/or build provisions.



# Capital Build or Release Provision

- Simple calculation → Get to 100% MCT in the required timeframe:
  - 5 years for a capital build
  - 3 years for a capital release
- Step 1: Determine the Basic MCT at the beginning of the rating period (i.e. March 1, 2020).
- Step 2: Calculate the Capital Build or Release Ratio
- Step 3: Calculate the Target MCT at the end of the rating period (i.e. March 31, 2022)
- Step 4: Compare the forecasted MCT to the Target MCT at the end of the rating period. Apply Capital Build or Release Provision if necessary.



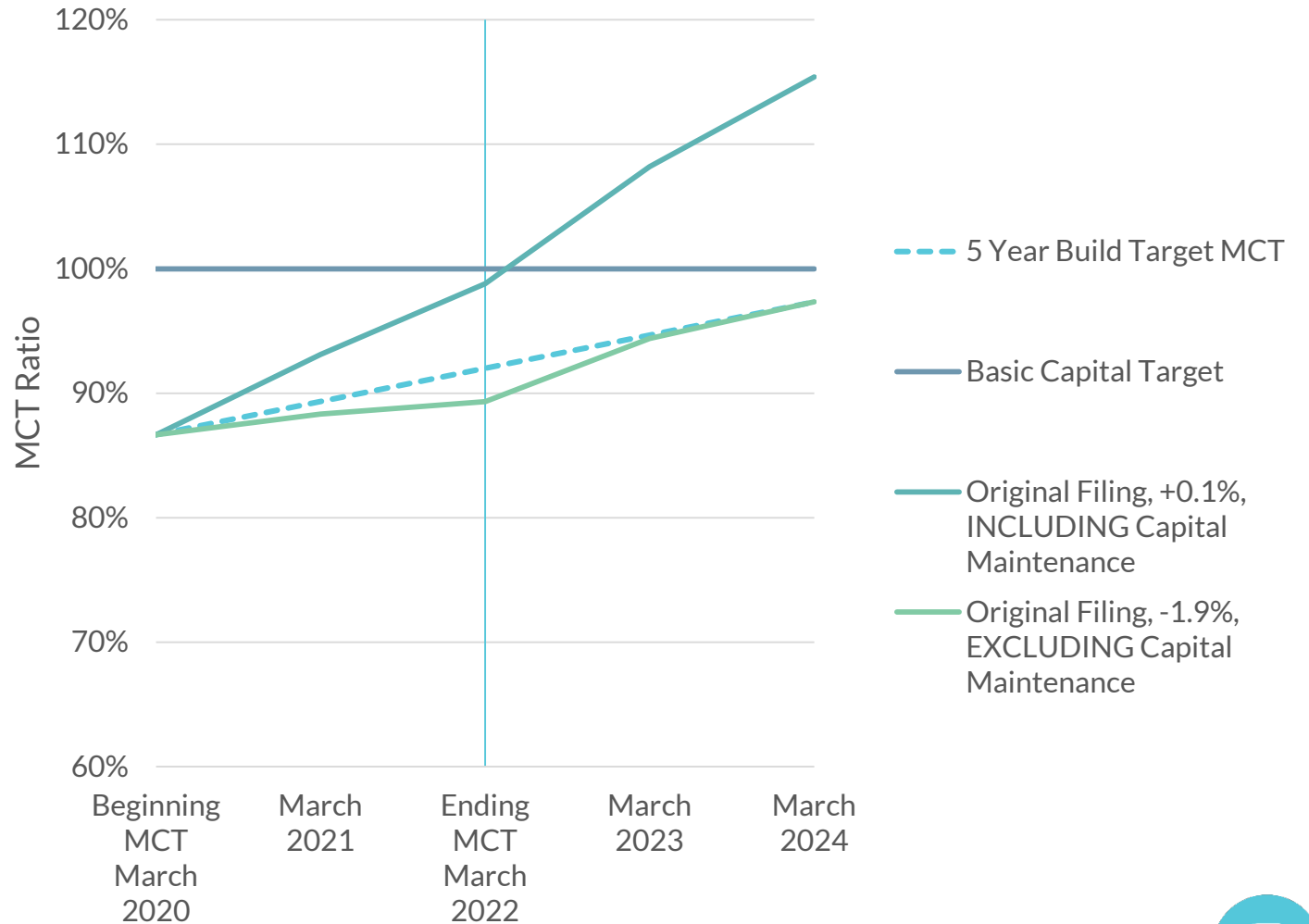
# Elimination of Capital Maintenance Provision

- The Capital Maintenance Provision was determined to be no longer necessary under the proposed Capital Management Plan
- At each GRA, MPI will now assess if the projected MCT ratios have achieved the target MCT ratios as set out by the Capital Management Plan.
- If the target is not achieved, MPI will apply a build provision up to the target level.



# GRA – as filed June 13, 2019

- AAP: +0.1%
- Capital Factor in rates (2019 GRA): +2.1%
- Incremental Capital Build/Release: 0.0%
- Total Rate Change: +0.1%



# GRA Amendment – as filed October 4, 2019

- AAP: +1.5%
- Capital Factor in rates: +2.1%
- Incremental Capital Build/Release: -2.1%
- Total Rate Change: -0.6%

