

REVIEW OF RATE APPLICATION SUBMITTED BY: MANITOBA PUBLIC INSURANCE ACTUARIAL EVIDENCE

Province of Manitoba Public Utilities Board

September 24, 2021

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1. Executive Summary

1.1. Purpose

Oliver, Wyman Limited (Oliver Wyman) reviewed the compulsory driver and vehicle insurance rate application submitted by Manitoba Public Insurance (MPI). The application proposes premium levels for the 12-month period from April 1, 2022 to March 31, 2023¹.

Prepared for: Public Utilities Board

Executive Summary

The Public Interest Law Centre (PILC) on behalf of the Consumers Association of Canada (Manitoba) Inc. (CAC Manitoba), an intervener in the rate application review proceeding, retained Oliver Wyman to provide this report.

The scope of our retainer was to assist in the review of the MPI General Rate Application (GRA) on issues related to:

- Driver Safety Rating
- COVID-19, including implications for estimates for the 2021/22 and 2022/23 program years in terms
 of reasonableness of claims frequency,
- Issues relating to the case reserves for accident benefit weekly indemnity (WI) and indexed,
- A high-level review of actuarial assumptions including any elements of undue conservatism,
- The Capital Management Plan (CMP), including the 5% capital release removal and the impact on premium deficiency if not removed; and
- IFRS 17 financial impact and how other P&C organizations are handling this matter in their 2022/23 rate making.

Rate Indication Summary

MPI estimates its 2022/23 breakeven premium level to be 2.8% below, on average, premiums that would be collected under the 2021/22 program. MPI achieves this reduction through the combination of (i) an overall base rate change of -0.2% and (ii) a 2.6% reduction due to higher vehicle discounts. We present MPI's proposed changes by class in Table 1.

Manitoba Public Utilities Board

The Public Utilities Board of Manitoba (PUB) is an independent, quasi-judicial administrative tribunal that has broad oversight and supervisory powers over public utilities and designated monopolies, as set out in statute. The PUB considers both the impact to customers and financial requirements of the utility in approving rates.²

In the execution of that mandate, the Board established a hearing schedule for the MPI GRA that is the subject of this report.

¹ Unless otherwise indicated, the "20XX/(XX+1)" convention refer to periods incepting April 1, 20XX and expiring March 31, 20XX+1

² http://www.pubmanitoba.ca/v1/about-pub/index.html

We recognize that in making its determination as to whether the rates proposed by MPI are just and reasonable, the Board will also consider the supporting documentation presented by MPI, issues raised by CAC Manitoba and other Registered Interveners, and any other information the Board deems appropriate.

Table 1: Proposed Rate Changes

Class	Indicated Change to Breakeven Premium	DSR Discount Change	Base Rate Change
Private Passenger	-3.0%	-2.8%	-0.2%
Commercial	-1.0%	-0.1%	-0.9%
Public	+5.0%	-0.5%	+5.5%
Motorcycles	-1.9%	-3.3%	+1.5%
Trailers	-6.7%	+0.0%	-6.7%
Off-Road Vehicles	-8.0%	+0.0%	-8.0%
Overall	-2.8%	-2.6%	-0.2%

1.2. Findings and Conclusions

We reviewed the aspects of the MPI filing that were within the scope of our retainer.

Our findings are based on the information contained in the application, responses provided by MPI to our questions, and our professional judgment.

We did not identify any concerns with MPI's estimation of the impact of COVID-19, issues related to case reserves and index for accident benefits WI, and the financial impact of IFRS 17.

We identified concerns with respect to the Driver Safety Rating program; actuarial assumptions, specifically, trend assumptions; and the Capital Management Plan. We discuss those concerns in this report.

As per our retainer agreement with PILC, we confirm that:

- We are providing evidence that:
 - is fair, objective and non-partisan;
 - is related only to matters that are within our area of expertise; and
 - we will provide such additional assistance as the Public Utilities Board may reasonably require to determine an issue.
- Our duty in providing assistance and giving evidence is to help the Public Utilities Board. This duty overrides any obligation to CAC Manitoba.

* * * * *

We developed the estimates in this report in accordance with the applicable Actuarial Standards of Practice issued by the Canadian Institute of Actuaries.

Please direct all questions related to this report to the undersigned.

Oliver, Wyman Limited

Paula L'Elliott

Paula Elliott, FCIA, FCAS

paula.elliott@oliverwyman.com

Rajesh Sahasrabuddhe, ACIA, FCAS

rajesh.sahasrabuddhe@oliverwyman.com

2. MPI Rate Filing

MPI submitted its automobile rate application to the Board on June 28, 2021. The Board issued a Notice of Hearing on July 3, 2021.

The following information was available for our initial review:

MPI's 2022 General Rate Application

In addition, as scheduled, we submitted interrogatories (IRs) to MPI on July 22, 2021 and August 30, 2021, and received its responses on August 17, 2021 and September 15, 2021, respectively.

The Board scheduled an oral hearing of MPI's rate application to begin on October 12, 2021.

3. Scope of Review

The purpose of our retainer was to assist in the Public Utilities Board review of the MPI automobile rate application on issues related to:

- Driver Safety Rating
- COVID-19, including implications for estimates for 2021/22 and 2022/23 program years in term of reasonableness of claims frequency,
- Issues relating to the case reserves for accident benefit WI and indexed,
- A high-level review of actuarial assumptions including any elements of undue conservatism,
- The Capital Management Plan, including the 5% capital release removal and the impact on premium deficiency if not removed; and
- IFRS 17 financial impact and how other P&C organizations are handling this matter in their 2022/23 rate making.

3.1. Driver Safety Rating

The GRA proposes changes to vehicle discounts available through the Driver Safety Rating (DSR) program. Specifically, MPI proposes to increase the discount applied to DSR Levels +10 to +15.

The Driver Safety Rating Chapter details the requested changes, which involve:

- An increase to the maximum merit level under the DSR scale from +15 to +16 in the 2022/23 policy year;
- Allocation of 2.6 points of the 2.8 point indicated reduction in breakeven premiums to the DSR vehicle discount levels with the most significant need for rate decreases based on actuarial indications; and,
- No changes to DSR driver premiums.

MPI intends the allocation of the breakeven premium reduction to address equity and fairness as registered owners with DSR ratings of +10 or higher currently subsidize drivers with lower DSR ratings. However, MPI's proposal does not fully adopt the actuarially indicated discount levels. As a result, subsidization from higher DSR levels to lower DSR levels continues to exist. We discuss this concern in Section 4 of this report.

3.2. COVID-19

In its analysis, MPI considers the following effects of COVID-19 pandemic:

DSR Scale Movement MPI expects a reduction of 0.3% of premium revenue for rating year 2022/23 as a result of changes to the distribution of vehicles by DSR level. Specifically, given the significantly lower collision frequency in 2020/21 resulting from reduced driving during the COVID-19 pandemic, MPI expects a significant movement (of registered owners) up the DSR scale in 2021/22, which will carry into 2022/23.

Prepared for: Public Utilities Board Scope of Review

Trend For collision, property damage, accident benefits other (indexed) and income replacement indemnity, MPI excluded experience for 2020/21 in its calculation of indicated exponential trend. MPI intended the exclusion to remove the effect of COVID-19 on claims costs.

Pure Premiums MPI excluded 2020/21 pure premium experience for basic collision, basic property damage to remove the effect of COVID-19 on claims costs.

We (and MPI) continue to expect a lower than expected claim frequency for 2021/22 due to the COVID-19 pandemic. Specifically, MPI assumed that COVID-19 reductions would continue until June 30, 2021, and that, after June 30, 2021, there would be a gradual return to work period over the following three months. Under this assumption, there is no residual effect of the pandemic in the 2022/23 program year.

It is our view that the "new normal" may include fewer kilometers driven per vehicle. However, we appreciate the significant uncertainty associated with the phase-in to the new normal and any potential reduction in kilometers driven. In summary, while the lasting effects may include lower frequency, those effects are not reasonably estimable.

We further note that the Capital Management Plan mitigates the potential overcollection of premiums related to events for which the effect cannot be reasonably estimated.

We concluded that MPI's consideration of COVID-19 in the development of rates is reasonable. We therefore do not discuss this further in that context. However, we consider the potential effect of COVID-19 in our commentary on the Capital Management Plan.

3.3. Case Reserves for Accident Benefit Weekly Indemnity

Prior to 2015/16, MPI did not index case reserves for coverages that are subject to indexation. As a result, the projected reported incurred did not account for the increase in benefits from indexation. MPI has since indexed (strengthened) its case reserves.

Case reserves are complemented by the incurred-but-not-reported³ (IBNR) reserves in the estimate of the aggregate unpaid amount. The indexing of case reserves presented a concern that the change would be misinterpreted as adverse development rather than case reserve strengthening. Case reserve strengthening reduces the need for a reserve whereas adverse development increases the need for IBNR. MPI discusses this issue in Section CI.2.8 of Part V – Claims Incurred.

We have reviewed the MPI discussion, the data in Appendixes 1 through 2g Tables 6 through 9, and the determination of loss development factors in MPI Exhibit #3 Part VIII – EAR Attachment B. We did not identify a bias from misinterpretation as described above. Therefore, we do not discuss this issue further.

³ The aggregate unpaid claim is estimate is comprised of case reserves and IBNR. Case reserves are amounts established by case adjusters based on the facts known at that time. Actuaries develop IBNR reserves using mathematical and statistical models. The IBNR reserve represents a provision for: (a) events that have occurred for which claims have not been reported as of the accounting date, (b) future development of the case reserves, (c) claims that have been reported but not yet recorded in the loss listing, and (d) claims that have been closed but that will be reopened.

3.4. Actuarial Assumptions

We reviewed the actuarial assumptions in the MPI calculation to identify any elements of undue conservatism. We concluded that MPI's determination of trend resulted in undue conservatism. We discuss this issue further in Section 5 of this report

3.5. Capital Management Plan

The trial Capital Management Plan (CMP) provides the means and pathway to achieve the capital target of 100% Minimum Capital Test (MCT) ratio for the Basic Rate Stabilization Reserve (RSR).⁴ The details of the CMP are provided in RSR.6 of Part VII – Rate Stabilization Reserve.

To ensure that basic capital is consistently adjusted to a 100% MCT target, basic rates may include a capital build or capital release provision. In cases where capital is significantly above the target, MPI may provide a capital rebate.

The 2022 GRA proposed the elimination of the 5% capital release provision the PUB approved in the 2021 GRA. Concurrently, MPI would seek approval for a capital rebate.

We have concerns with mixing (i) the prospective ratemaking with (ii) the capital build/release provisions that result from the prior period experience. However, we recognize practical issues with the returning excess capital and the concluded that a CMP with modest build/release provisions was, on balance, a reasonable approach to capital management.

In addition, we concluded that there is a benefit to maintaining approved 5% capital release provision and that the capital release provision would not preclude the rebate described. This approach provides for a more consistent governance approach as to the capital maintained by MPI. That governance is critical given the uncertainty associated with the unwinding of the COVID-19 pandemic. We discuss the Capital Management Plan implemented by MPI in Section 6 of this report.

3.6. IFRS 17 Impact

MPI will adopt International Financial Reporting Standards (IFRS) 9 and 17 on April 1, 2023 with a comparative year for IFRS 17 starting on April 1, 2022.

In response to CAC (MPI) 1-69, MPI indicates that it "expects there to be negligible impact on ratesetting since rates will continue to be based on Accepted Actuarial Practices (and therefore is largely independent of accounting presentation changes)."

The state of MPI's readiness and its general evaluation of the effect of IFRS 17 is consistent with our experience with other automobile insurers. We therefore do not discuss this issue further.

 $^{^{\}rm 4}$ The appropriateness of the 100% MCT ratio target is outside the scope of our review.

4. Actuarial Commentary: Driver Safety Rating

4.1. Introduction

PUB Order 89/09 (May 28, 2009) introduced the Driver Safety Rating (DSR) Program with the goal of "effectively motivating improved driving behaviour." To achieve this goal, the DSR Program would need to both (i) assign credits and surcharges to the driver exhibiting excellent or poor driving behaviour and (ii) include the credits and surcharges commensurate with the reduction/increase in risk. The current program implementation does not fully achieve the stated goal. That is, by not fully crediting policyholders with better experience, there is a lessening of the incentive for improved driving behaviour.

4.2. The Registered Owner Model and the Primary Driver Model

Fairness

The DSR Program currently operates on a "registered owner" basis. That is, the DSR Program assigns credits to the registered owner of the vehicle. In contrast, a "primary driver" model would assign credits to the individual responsible for the driving behaviour. As a result, MPI notes in Part VI – DSR Appendix 1 that "the discounts and surcharges do not reflect the relative risk of drivers with different DSR levels." (emphasis added) MPI also acknowledges the biases inherent with vehicles rates at the boundaries of the DRS scale (DSR + 15 and DSR –20).

Data Required

MPI indicates that the primary driver model would require that "the primary driver(s) of the vehicle would have to be declared when the insurance policy is written." (Part VI – DSR Appendix 1) MPI further indicates that it "did not conduct a pricing examination using the primary driver model mainly because it does not have the information on the primary driver(s) of its insured vehicles." (Part VI – DSR Appendix 1)

Conclusion

A primary driver model would better support the goals of the DSR program, and the collection of information does not appear to be onerous. We suggest that MPI begin to collect that data with the 2022/23 program year to implement a primary driver model in the near future.

4.3. Subsidization

MPI does not adopt the actuarially indicated DSR rate level as they view the increase in the base rate required to maintain revenue neutrality as publicly unacceptable. As a result, drivers at DSR Levels 10 and above continue to subsidize the risk for drivers at DSR levels 9 and below.

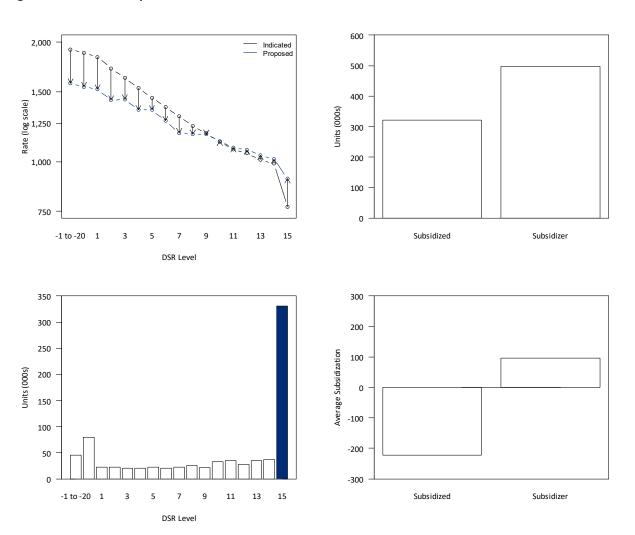
In Figure 1, we present the implications of this policy.

• In the top-left panel, we present a comparison of the proposed rates to the indicated rates. We note the significant increase from the actuarially indicated rates to the proposed rates for policyholders with better experience at DSR Level 15 and the subsidization of policyholders with poorer experience at the lower DSR levels.

- In the bottom-left panel, we present the distribution of units by DSR level. We note the majority of
 policyholders have better experience and are at higher DSR levels, including the largest cluster
 policyholders at DSR Level 15.
- In the top-right panel, we present a comparison of subsidized risks and subsidizing risks. More policyholders are disadvantaged by the subsidization than benefit from the subsidization.
- In the bottom-right panel, we present the average subsidy.

The data presented in Figure 1 illustrates that (i) the greatest number of policyholders are at DSR +15, (ii) those policyholders are paying rates greater than actuarially indicated and (iii) that subsidisation accrues to a minority of policyholders.

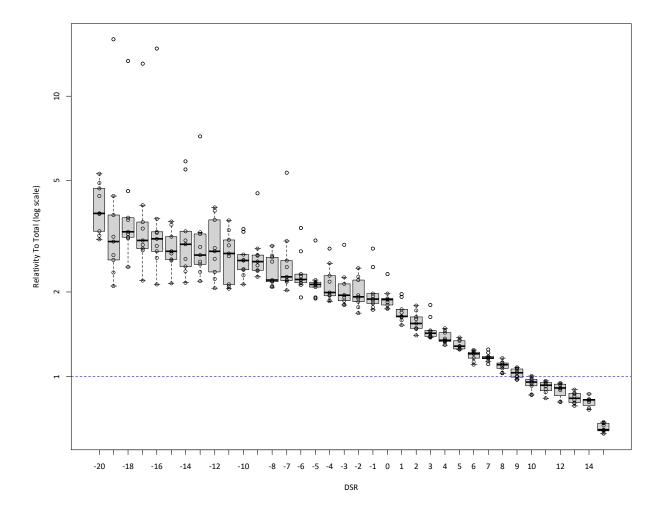
Figure 1: MPI DSR Proposal



In Figure 2 and Figure 3, we present the non-PIPP and PIPP pure premium relativities for policyholders at the various DSR levels. A "relativity" represents a ratio to the average, and as a result, the average relativity will be 1.0. Relativities above 1.0 indicate poorer experience and relativities below 1.0 indicate better experience.

We note that policyholder experience at higher DSR levels is observably better than experience at lower DSR levels. This pattern indicates that policyholders at the higher DSR level would be overcharged and deserve the actuarially-indicated credits.

Figure 2: Non-PIPP Pure Premium Relativities



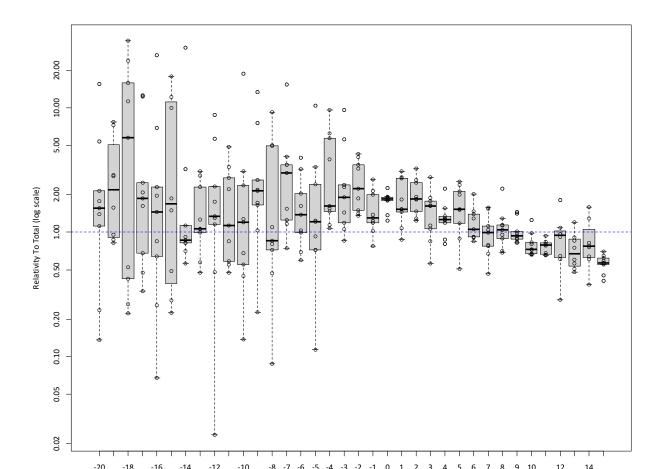


Figure 3: PIPP Pure Premium Relativities

4.4. Conclusion

MPI did not adopt the actuarially indicated DSR credits citing public acceptability concerns. As a result, the MPI proposal results in the majority policyholders with better experience subsidizing the minority of policyholders with poorer experience. Furthermore, we note that the MPI 2021 proposal also included subsidization. Although we recognize that ratemaking is a prospective exercise, we also appreciate that perpetuating the subsidy increases the cumulative detriment to Manitoba policyholders with better experience.

DSR

Given the stated goals of the program and fairness issues with the subsidization, we recommend that the Public Utilities Board adopt actuarially indicated DSR credits with due consideration to the acceptability of year-over-year rates changes and the use of capping to address acceptability.

5. Actuarial Commentary: Loss Trends

5.1. Introduction

Pure premium trend rates are a critical assumption in the determination of rate level indications. Actuaries apply trend factors to adjust the experience period ultimate incurred pure premium to levels anticipated during the policy period covered under the proposed rate program. All else being equal, the higher the selected pure premium trend rates, the higher the rate level indication.

For many insurers, consistent with Section 1620.21-23 of the Standards of Practice of the Canadian Institute of Actuaries, the application of trend rates is a two-step process. That is, "past trend" reflects observed changes in cost conditions that have taken place, and "future trend" reflects changes in cost conditions expected to occur between the end of the experience period and the period the new premiums will be in effect. That is, past trend rates reflect the cost level changes that occurred during the experience period, and future trend rates reflect those changes as well as the likelihood that those patterns may change.

In Part VI – RM Appendix 9, Table 6, MPI summarizes its pure premiums trends. In Table 2, we present the pure premium trend rates indicated and selected by MPI and alternate trend models that we propose.

Table 2: Summary of Pure Premium Trends

	MPI		Oliver Wyman		
Coverage(s)	Indicated	Selected	Past Pure Premium Trend	Future Pure Premium Trend	
Bodily Injury	+2.40%	+2.50%	+2.40%	+1.00%	
Property Damage	+0.38%	+0.50%	0.00%	0.00%	
Collision	+3.64%	+3.75%	+0.62%	+0.62%	
Comprehensive	+1.93%	+2.00%	0.00%	0.00%	
Income Replacement	+0.21%	+0.25%	0.00%	0.00%	
Accident Benefits Other (Indexed)	-1.20%	0.00%	0.00%	0.00%	
Accident Benefits Other (Non-Indexed)	-1.88%	0.00%	-1.88%	-1.88%	

We disagree with the selected trends for coverages other than accident benefits other (indexed). We have two categories of concerns:

- Selection of trends that are not statistically significant This concern applies to property damage, comprehensive, income replacement, and accident benefits other (non-indexed). We discuss this concern in Section 5.2.
- Models that result in inappropriate conclusions This concern applies to collision and bodily injury. We discuss this concern in Section 5.3.

We are also concerned that MPI consistently rounds up between its indicated and selected values. However, we address this concern in the context of the items listed above.

5.2. Statistical Significance

MPI fits log-linear least squares regression models to estimate trends. The exponentiated value of a coefficient from the fitted trend model represents indicated trend. Standard regression model output includes a metric known as a *p*-value for each model coefficient, and the review of *p*-values is a standard process in assessing a regression model.

The *p*-value indicates the probability that the coefficient would have occurred by chance if the true value of the coefficient were 0. The typical threshold for accepting a coefficient is a p-value less than or equal to 0.05. That is, coefficients are **statistically significant** if there is a less than 5% chance that we would observe the value by chance. When the p-value exceeds 0.05, we conclude that the model could not discern a statistically significant trend.

In Figure 4, we demonstrate our concern using comprehensive coverage as an example.

The top panels present the MPI approach.

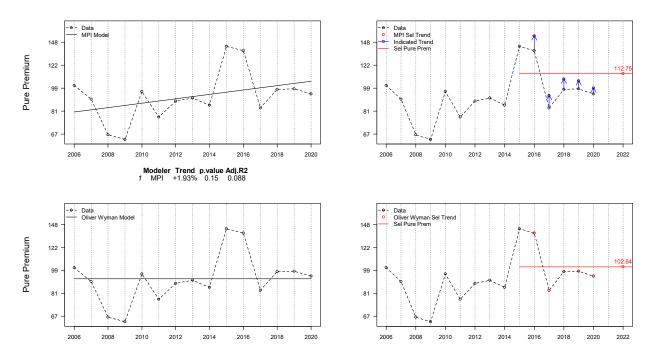
- The top left panel presents the MPI model and the associated *p*-value of 0.15. We further note the low adjusted R-squared value of 0.088 and that the last four data points are below the fitted line. The low adjusted R-squared indicates that the model explains only a minimal percentage of the variation in the data. Having four data points (2017 to 2020) below the regression line is a "run of negative residuals" and indicates a potential positive bias with the regression model fit.
- The top right panel demonstrates MPI's application of trend to project the data points as indicated by the blue arrows. The positive trend increases the data points and produces an average trended pure premium of \$112.75.

The bottom panels present the approach that we suggest.

- In the bottom-left panel, we concluded that the model could not discern a statistically significant trend.
- Without statistical evidence to support a nonzero trend, we do not adjust the data points in the bottom-right panel.

The right panels present the implication if a rate indication includes a trend that is not statistically significant. The resulting pure premium under our approach is \$102.64 or 9.0% below the MPI proposed pure premium of 112.75.

Figure 4: Comprehensive Trend



Rather than repeat these concerns for property damage, income replacement, and accident benefits other (non-indexed), we provide the p-values for these coverages in Table 3. The support for our trends is as follows:

- For property damage and income replacement, the indicated trends are not statistically significant. Therefore a 0% trend is appropriate for these coverages.
- The *p*-value for the indicated trend for accident benefits other (non-indexed) is statistically significant, and, therefore, the appropriate trend is -1.88%, as estimated by MPI.
- For accident benefits other (indexed), the *p*-value also exceeds 0.05; however, MPI selected 0%. As such, we have no concerns with the selected trend for that coverage.

Table 3: Summary of MPI Trend Model Diagnostics

Coverage(s)	MPI Indicated Trend	<i>p</i> -value	Adjusted R- Squared	Statistically Support Trend	MPI Selected Trend
Property Damage	0.38%	0.376	-0.012	0.00%	0.50%
Income Replacement	0.21%	0.728	-0.072	0.00%	0.25%
Accident Benefits Other (Non-Indexed)	-1.88%	0.000	0.650	-1.88%	0.00%
Accident Benefits Other (Indexed)	-1.20%	0.186	0.069	0.00%	0.00%

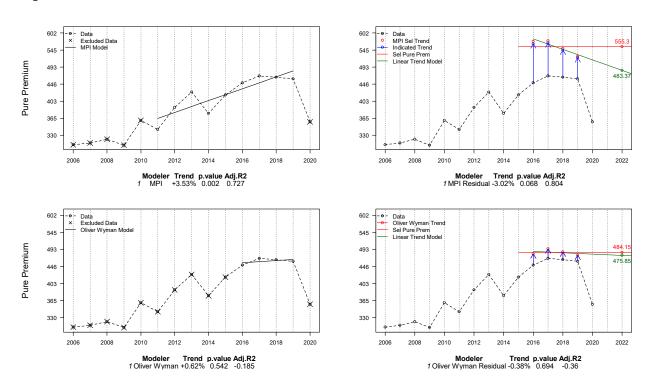
5.3. Inappropriate Trend Models

For collision and bodily injury, we believe that the MPI trend models are inappropriate.

Collision

We present our four-panel trend analysis for collision in Figure 5.

Figure 5: Collision Trend



Although the trend is statistically significant, the MPI approach does not recognize the flattening since 2016. In the top-right panel, we note the material implications. The trend factor adjusts the data points from a four-year (2016/17 - 2019/20) average of \$ 460.27 to \$ 555.30.

- A visual inspection of the top-right panel indicates that the projected pure premium of \$555.30 is unreasonable given the pure premium history for collision.
- There is a nearly statistically significant trend (*p*=0.068) *in* the trended-adjusted values (blue arrows). This observation indicates the trend model is not appropriate for the data points subject to the trend adjustment.

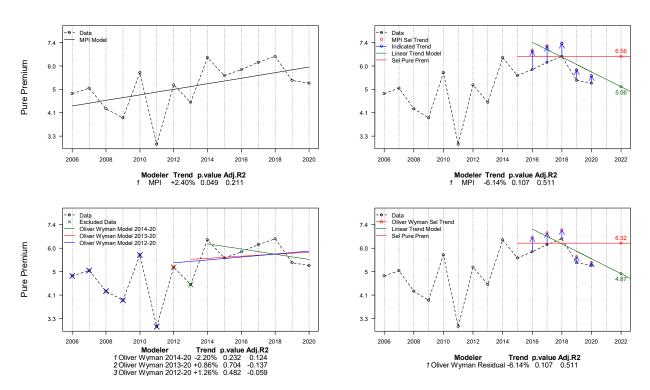
We believe that it would be more appropriate to fit a model to the most recent four data points and that model would have produced a statistically **in**significant trend of 0.62%. Consistent with the discussion in Section 5.2, we would suggest a trend of 0%. However, as MPI does not consider *p*-values in its analysis, as a sensitivity test, we provide the indicated projected pure premiums assuming a +0.62% trend. The resulting average pure premium is \$484.15.

• A visual inspection of the bottom-right panel indicates that this pure premium is more reasonable than that presented in the top-right panel. Additionally, there is no statistically significant trend in the trended-adjusted values.

Bodily Injury

We present our four-panel trend analysis for bodily injury in Figure 6.

Figure 6: Bodily Injury Trend



For bodily injury, the fitted trend of +2.4% is statistically significant. However, we observe a flattening since 2012. We fit models to the data points between 2012 and 2020, between 2013 and 2020, and between 2014 and 2020. The resulting trends were +1.26%, +0.86%, and -2.20%, respectively. As a result of this declining pattern, a different future trend rate would have been appropriate. As a sensitivity test, we provide indications under a future trend assumption of +1.0%. The resulting pure premium is \$6.32.

6. Actuarial Commentary: Capital Management Plan

6.1. Introduction

As described in Part VII – Rate Stabilization Reserve, Section 6.1:

In the 2021 GRA, MPI applied for and the PUB approved a 5.0% capital release provision. Although MPI expected that it and the PUB would reassess the provision at each GRA, the 2021 GRA effectively assumed that the 5% capital release would be in effect for several years (i.e. until the Basic MCT ratio returned to approximately 100%).

...

MPI now proposes to rebate the Basic surplus instead of applying for another capital release.

6.2. Rebate and Capital Management

In CAC (MPI) 2-37, we asked whether MPI considers the capital release versus the special rebate to be an "either/or" option. MPI's response was as follows:

MPI does not consider the capital release and the capital rebate to be an "either/or" option, but rather different methodologies that allow for MPI to return excess capital to policyholders. The two methodologies differ primarily in the timing and execution. ... MPI acknowledges there are various ways to return excess capital. It could be released expeditiously through a special capital rebate, released slowly through a capital release, or released via a hybrid approach through both rebate and release.

We note that in the last year, MPI has applied for special rebates as "exceptions" to its CMP.

6.3. Ratemaking as a Prospective Exercise

Ratemaking is a prospective exercise whereas the return of capital results from the underwriting and investment results of prior program years. Mixing the capital return and the prospective rate has the potential to create consumer confusion. In addition, the capital build/release provision has a potential fairness issue in that the build/release does not apply to the exact population of insureds responsible for the capital situation.

We appreciate that neither of these conditions is ideal. However, we also appreciate the difficulty in measuring individual insured or insured cohort contributions to the capital as logistical difficulties in returning excess capital or collecting amounts to offset capital deficiencies to/from insureds in prior program years. Under these circumstances, we view an approach that includes a modest capital/build provision in the current rates to be reasonable.

6.4. Conclusion

We agree that a rebate would allow for a more expedient return of capital to policyholders. However, we note that the current source of the excess capital is the COVID-19 pandemic, which we view as a

Manitoba Public Insurance

non-recurring event. It is our view that changes in approach should not be the result of such events. That is, we suggest that:

- MPI maintain the capital management plan which would require a regular review of capital
 adequacy. Ratemaking is an exercise in estimation and actual results will vary from those estimates,
 and those variances will affect MPI's capital level. In our view a regular review of capital is prudent
 in such circumstances.
- MPI include the 5% capital release in 2022/23 rate program.
- MPI use a rebate to return additional excess capital resulting from the extraordinary circumstances
 of the pandemic.

7. Distribution and Use

Usage and Responsibility of Client – Oliver Wyman prepared this report for the sole use of CAC Manitoba and the Public Utilities Board for the stated purpose. This report includes important considerations, assumptions, and limitations and, as a result, is intended to be read and used only as a whole. This report may not be separated into, or distributed, in parts other than by CAC Manitoba and the Public Utilities Board, as needed, in the case of distribution to such client's directors, officers, or employees. All decisions in connection with the implementation or use of advice or recommendations contained in this report are the sole responsibility of CAC Manitoba.

Prepared for: Public Utilities Board

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8. Considerations and Limitations

COVID-19 Pandemic – We have included no explicit adjustments in this report for the effect of the COVID-19 pandemic on loss experience except as specifically noted in this report. The impact of this event on loss experience is highly uncertain and generally unquantifiable at this time.

Data Verification – For our analysis, we relied on data and information provided by MPI without independent audit. Though we have reviewed the data for reasonableness and consistency, we have not audited or otherwise verified this data. Our review of data may not always reveal imperfections. We have assumed that the data provided is both accurate and complete. The results of our analysis are dependent on this assumption. If this data or information is inaccurate or incomplete, our findings and conclusions might therefore be unreliable.

Prospective Policy / Accident Period Estimates – We estimated the prospective policy/accident period estimates developed in this analysis using estimated loss costs and the projected exposures. Prospective period loss and ALAE estimates are directly related to the projected exposures. Therefore, if actual exposures differ from the projection, we would need to adjust the prospective policy/accident period estimates accordingly.

Supplemental Data — Where historical data of MPI was either (i) not available, (ii) not appropriate or (iii) not sufficiently credible to develop our actuarial assumptions, we supplemented it with external information, as we deemed appropriate. Although we believe these external sources may be more predictive of future experience of MPI than any other data of which we are aware, the use of external data adds to the uncertainty associated with our projections.

Exclusion of Other Program Costs – The scope of the project does not include the estimation of any costs other than those described herein. Such ancillary costs may include unallocated loss adjustment expenses (ULAE); excess insurance premiums; the costs of trustee, legal, administrative, risk management and actuarial services; fees and assessments; and costs for surety bonds or letters of credit pertaining to claim liabilities.

Assumption of Valid Insurance – We assumed that all insurance/reinsurance is valid and fully collectible. We made no assessment, and do not express any opinion, concerning the viability or collectability of any insurance or reinsurance. We have not evaluated the financial strength, claimspaying ability or any other factors with regard to the past, current, and prospective insurers/reinsurers of MPI.

Funding of Claim Payments – We have not examined any assets that may be supporting the liabilities, and we have made no assumptions regarding the maturities and liquidity of these assets, should they exist. This examination is beyond the scope of our review.

Rounding and Accuracy – Our models may retain more digits than those displayed. Also, the results of certain calculations may be presented in the exhibits with more or fewer digits than would be considered significant. As a result, there may be rounding differences between the results of calculations presented in the exhibits and replications of those calculations based on displayed underlying amounts. Also, calculation results may not have been adjusted to reflect the precision of the calculation.

Unanticipated Changes – We developed our conclusions based on an analysis of the data of MPI and on the estimation of the outcome of many contingent events. We developed our estimates from the historical claim experience and covered exposure, with adjustments for anticipated changes. Our estimates make no provision for extraordinary future emergence of new types of losses not sufficiently represented in historical databases or which are not yet quantifiable. Also, we assumed that MPI will remain a going concern, and we have not anticipated any impacts of potential insolvency, bankruptcy, or any similar event.

Internal / External Changes – The sources of uncertainty affecting our estimates are numerous and include factors internal and external to MPI. Internal factors include items such as changes in claim reserving or settlement practices. The most significant external influences include, but are not limited to, changes in the legal, social, or regulatory environment surrounding the claims process. Uncontrollable factors such as general economic conditions also contribute to the variability.

Uncertainty Inherent in Projections – Users of this analysis should recognize that our projections involve estimates of future events and are subject to economic and statistical variations from expected values. We have not anticipated any extraordinary changes to the legal, social, or economic environment that might affect the frequency or severity of claims. For these reasons, we do not guarantee that the emergence of actual losses will correspond to the projections in this analysis.

Appendix A. Biographies

Paula Elliott and Rajesh Sahasrabuddhe are the actuaries responsible for this report. Ms. Elliott and Mr. Sahasrabuddhe provide actuarial consulting services related to automobile insurance throughout Canada. Those service include reviewing automobile insurance rate applications, providing expert witness testimony on rate applications, analyzing automobile insurance reform measures, development of model governance frameworks, conducting automobile insurance benchmark rate studies and performing special studies.

Paula Elliot

Paula holds a Bachelor of Mathematics, Actuarial Science (Hons) from the University of Waterloo. Paula is a Principal in the Toronto, Ontario office with the Actuarial Consulting practice of Oliver, Wyman Limited. She specializes in the automobile insurance practice area and in providing actuarial services to insurance regulatory authorities.

Her primary responsibilities include reviewing automobile insurance rate applications, providing expert witness testimony on rate applications, analyzing automobile insurance reform measures, conducting automobile insurance benchmark rate studies and performing special studies.

Prior to joining Oliver Wyman, Paula provided actuarial services to a large insurer as an employee for over 15 years with many areas of responsibility including rate making, loss reserving and financial planning.

Paula is a Fellow of the Canadian Institute of Actuaries and a Fellow of the Casualty Actuarial Society.

Rajesh Sahasrabuddhe

Rajesh ("Raj") holds a Bachelor of Science, majoring in Mathematics – Actuarial Science (summa cum laude) from the University of Connecticut. Raj is a Partner and Philadelphia Office Leader with Oliver Wyman Actuarial Consulting. His primary responsibilities are to provide actuarial consulting services to regulators and a variety of insurance, reinsurance and self-insured organizations.

Raj reviews automobile rate applications in on behalf of regulators and consumer stakeholders in several Canadian provinces. Within the scope of this work, he provides expert witness testimony in rate hearings.

Raj is a Fellow of the Casualty Actuarial Society, an Associate of the Canadian Institute of Actuaries, and a Member of the American Academy of Actuaries. He has been approved to provide captive loss reserve certifications by regulatory authorities in Vermont, South Carolina, Delaware, and Bermuda.

Prior to joining Oliver Wyman, Raj provided actuarial consulting services to self-insured clients at a national brokerage company and financial advisory and litigation support services at an independent consulting firm. With his prior experience at a Big Four audit firm, he is also familiar with insurance accounting issues.

⁵ Including in New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario, Saskatchewan, Alberta, British Columbia and now Manitoba.

Oliver Wyman 120 Bremner Boulevard, Suite 800 Toronto, ON M5J 0A8

Three Logan Square 1717 Arch Street, Suite 1100 Philadelphia, PA 19103