Order No. 162/16

MANITOBA PUBLIC INSURANCE CORPORATION (MPI OR THE CORPORATION): COMPULSORY 2017/2018 DRIVER AND VEHICLE INSURANCE PREMIUMS AND OTHER MATTERS

December 15, 2016

BEFORE: Robert Gabor, Q.C., Chair
Karen Botting, B.A., B.Ed., M.Ed., Vice Chair
The Hon. Anita Neville, P.C., B.A. (Hons.), Member
Allan Morin, B.A., ICD.D., Member

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EXECUTIVE SUMMARY

The Public Utilities Board (Board or PUB) hereby orders an overall 3.7% rate increase to Basic compulsory motor vehicle premiums (Basic or Basic Insurance) for the 2017/18 insurance year, 2017/18, effective March 1, 2017, for all major classes combined, the rate level change indicated in accordance with accepted actuarial practice in Canada. There will be no change in permit and certificate rates, driver license premiums and vehicle premium discounts, service and transaction fees, fleet rebates or surcharges, or the discount on approved after-market and manufacturer/dealer installed anti-theft devices.

In making this Order, for an overall increase of 3.7%, the Board has not approved the rate increase requested by MPI, which was for an overall increase of 4.3%, 2.3% of which was attributable to an Interest Rate Forecasting Risk Factor applied for by the Corporation. The Board finds that on the evidence before it the Corporation has not met its onus of proving that the applied for rate level change of 4.3% was just and reasonable.

The Board's order for a rate increase of 3.7% results from the Board's approval of rates calculated in accordance with accepted actuarial practice in Canada. The Board has previously commented, and continues to hold the view, based on the evidence before it in this Application, that ratemaking in accordance with accepted actuarial practice will serve to simplify the ratemaking process. It will also reduce the risk associated with the Corporation's need to predict interest rate changes, including the timing and degree of changes, in its current ratemaking practice. The Board is hopeful that rate-setting in accordance with accepted actuarial practice will serve to insulate the Corporation’s rate setting process from the risks caused by the need to predict interest rate changes under its current ratemaking model.

The Board's order for an increase of 3.7% does not mean that rates for all motorists within each major vehicle class increase by that amount. Rates paid by individual policyholders within each Major Class will be determined based on their driving record, the kind of vehicle (make and model and year) registered, the purpose for which the vehicle is driven and the territory in which the policyholder resides. Policyholders' premiums will also be impacted by actual claims experience.

The Board acknowledges that the Corporation has taken steps toward cost containment efforts. The Board is concerned, however, about MPI's costs related to various Information Technology (IT) initiatives, and whether the Corporation is making efficient expenditures in the IT area. The Board has therefore ordered that, in the next GRA, MPI file an overall five-year strategic plan with respect to its IT projects, supported by full business cases.

The Board heard a significant amount of evidence directed towards the issues of interest rate forecasting and MPI's investment portfolio. The Board is concerned with the performance of MPI's investment portfolio relative to that of its peers in Manitoba. Over the past ten years, MPI’s portfolio has underperformed that of the Civil Service Superannuation Board by 0.4 percentage points, the Workers' Compensation Board by 1.2 percentage points, and the Teachers' Retirement Allowances Fund by 1.7 percentage points. The Board also points out that Saskatchewan Government Insurance (SGI) has an investment portfolio which includes a public equity mix, where almost one quarter is in International equities. MPI has limited its equity investments to Canadian and US equities. The Board considers MPI's lower returns as compared to that of its peers to be attributable to the current investment asset mix employed by the Corporation. Had the performance of the Corporation's investment portfolio more closely matched that of its peers, a rate increase might not have been necessary. The Board is of the view that the Corporation would be well-served by obtaining a new Asset Liability Management (ALM) study, and directs MPI to obtain a further ALM study in advance of the next General Rate Application.

The Board notes that volatility in the value of MPI's investment portfolio continues to be one of its major risks and that neither the Corporation overall nor the Basic insurance program is fully immunized from interest rate risk. The Board is of the view that interest rate forecasting remains a challenge. The Board is hopeful that the practice of ratemaking in accordance with accepted actuarial practice will serve to mitigate some of the risks to the Corporation associated with difficulties in forecasting interest rates, while appreciating that doing so does not change the sensitivity of Basic financial forecasts to interest rate risk. Given the challenges with interest rate forecasting, the Board has ordered a Technical Conference take place on the issue of interest rate forecasting, employing an improved procedure from that used in the Technical Conference that took place in August of 2016.

The Board and MPI have been engaged for a number of years in discussions regarding the appropriate level of MPI's Rate Stabilization Reserve (RSR) and target capital range. For 2017/18, the Board has selected the same methodology to be utilized for the purposes of setting the lower threshold for the Basic target capital range for the Corporation as in the 2016 GRA, now calculated at $159 million of Basic total equity by MPI. In its Order No. 128/15, in respect of MPI's compulsory 2016/17 driver and vehicle insurance premiums, the Board approved a methodology for setting the upper threshold for the Basic target capital range, which was the use of a 100% Minimum Capital Test (MCT) ratio, but on a notional basis only. The Board also ordered MPI to continue to participate in a collaborative process in respect of Basic target capital range setting, which was to be completed by the time the Board considered the present rate Application. The Board finds that continued collaboration in this regard is required. It finds that the methodology for setting the upper threshold of the Basic target capital range must be consistent with the methodology for setting the lower threshold, and as such orders that the adaptation of the Dynamic Capital Adequacy Testing (DCAT) methodology also be employed for setting the upper threshold. The Board also orders a Technical Conference be conducted to further examine the adaptation of the DCAT methodology for the setting of the upper threshold.

The Board also directed in Order 128/15 that MPI work collaboratively with the Board's actuarial advisor and the advisors of the interveners, to enhance the transparency and robustness of MPI's ratemaking approach, with a view to strengthening MPI's ratemaking ability in accordance with accepted actuarial practice in Canada. The Board notes that MPI would be well-served by a continuation of this collaboration, both on a formal and informal basis, particularly given the Board's order in this Application that rates be set in accordance with accepted actuarial practice in Canada. The Board has therefore ordered that a Technical Conference and further, informal collaboration take place among MPI, Board advisors and interveners in that regard. This Technical Conference shall be held in conjunction with the Technical Conference on DCAT methodology.

The Board finds that further work is required in order for MPI to demonstrate that its road safety programming has reached maturity. The Board notes that, as of the date of the public hearings, the number of fatalities on Manitoba roadways in 2016 had reached 85, contrasted with 78 in total for all of 2015. This information is concerning to the Board. The Board looks to the Corporation to take a more aggressive approach and to further its leadership role regarding road safety planning and strategy in Manitoba. The Board is therefore directing the Corporation to file with the next GRA a five-year strategic plan with respect to road safety programming, addressing road safety issues including distracted driving, drug-impaired driving, wildlife collision prevention, mature drivers, and vulnerable road users. The Board is also concerned with the challenges to come with the anticipated legalization of marijuana and directs MPI to examine strategies to target the issue of drug-impaired driving and disclose its plan of action in the next GRA. The Board also looks to the Corporation to target priorities in road safety and to develop a road safety plan with Government and industry stakeholders and has ordered that, at the next GRA, MPI produce updates and reports on a number of initiatives in that regard.

This Order reflects the Board's findings on matters which arose over the course of the proceeding through oral testimony and documentary evidence. Public access to the full transcripts of the hearing, including cross-examination, presentations and closing statements, as well as documentary evidence are available on the Board's website (www.pub.gov.mb.ca).

Interested parties may also review MPI's Annual Report and quarterly financial statements on MPI's website (www.mpi.mb.ca).

1. THE RATE APPLICATION

1.1. Procedural History

The Corporation filed the 2017 General Rate Application (GRA or Application) with the Board on June 17, 2016 for approval of premiums to be charged with respect to Basic, for the fiscal year commencing March 1, 2017 and ending February 28, 2018. The Application was filed in accordance with the provisions of *The Crown Corporations Public Review and Accountability Act* and *The Public Utilities Board Act*.

Following a pre-hearing conference which took place on June 30, 2016, by Order 85/16, dated July 12, 2016, the Board granted intervener status to the following parties:

- Consumers' Association of Canada (Manitoba) Inc. (CAC);
- Coalition of Manitoba Motorcycle Groups (CMMG);
- Canadian Automobile Association (CAA): and
- Bike Winnipeg (BW).

The scope of the intervention granted to BW was narrower than that of the other interveners. In summary, BW was to assist the Board in evaluating the optimum size of MPI's road safety budget and whether it is sufficient to enable a reduction in the costs to MPI of injuries to vulnerable road users (VRUs), the adequacy of MPI's road safety programs with respect to the fatal and severe injury of VRUs, and the quality and clarity of MPI's data collection, analysis and accessibility, regarding collisions involving vulnerable road users.

Twelve days of public hearings took place, during which the Board heard evidence from witnesses appearing on behalf of MPI and CAC, and heard submissions from presenters. The public hearings began on October 13, 2016, and concluded on November 4, 2016.

1.2. The Application

The Corporation sought a 2% increase in rates and an Interest Rate Forecasting Risk Factor (IRFRF) for 2017/18. The Corporation continues to seek to break even over a two year period, and projected a net loss of $0.8 million for 2017/18 and net income of $8.0 million for 2018/19, which averages approximately to a break even position.

At the hearing, the Corporation filed an updated interest rate forecast as at August 2016 which reflected that interest rates are expected to rise at a slower pace than originally forecasted in the Application. MPI requested the rejection of its Standard Interest Rate Forecast (SIRF) and requested rates be established on a modified interest rate forecast 50-50 basis (which will be referred to in this Order as the 50-50 interest rate forecast or 50-50 basis), representing the midpoint between the SIRF and a Naïve forecast, which reflects no change in interest rates from current levels. As a result of this updated interest rate forecast, Basic's indicated rate requirement was revised from 2% to 4.3%. As compared to the original Application, the additional 2.3% was the amount attributable to the IRFRF. MPI's originally projected net loss in 2017/18 will increase from $0.8 million to $10.8 million and its forecast net income for in 2018/19 will increase from $8.0 million to $24.1 million.

The vehicle premium rates put forward by MPI included experience-based rate adjustments largely ranging from -15% to +15%, and based on adjustment rules. In addition, the Corporation combined classification offsets for all vehicles except off-road vehicles, to achieve revenue neutrality and implemented rate group, rate line and classification changes for 2018.

According to the Corporation's rate design, the change to Basic compulsory motor vehicle premiums for each major vehicle class at the rate requested by MPI would have the following average vehicle premium changes:

Major Class	**2.0% Experience Rate Change**	**4.3% Experience Rate Change with IRFRF**
Private Passenger	1.7%	4.0%
Commercial	5.4%	8.8%
Public	3.7%	6.4%
Motorcycle	-1.7%	2.8%
Trailers	11.1%	10.2%
Off-road vehicles	0.0%	0.0%
Total	**2.0%**	**4.3%**

Rates paid by individual policyholders within each Major Class are determined by their driving record, the kind of vehicle (make and model and year) registered, the purpose for which the vehicle is driven and the territory in which the policyholder resides. Policyholders' premiums are also impacted by actual claims experience. As a result, some individuals would experience increases in insurance rates, and others would experience decreases. The indicated rate increases were after a special one-time adjustment to accommodate basing motorcycle rates on nine years of historical experience instead of ten years, per the normal practice. In effect, this would remove the 2006 claims experience, which had high motorcycle claims costs. This resulted in a lower indicated rate change for motorcycle from 8.8% to 2.4%. The rate changes for the other major classes, except for trailers, were adjusted upward to accommodate this one-time adjustment. MPI indicated the adjustment was appropriate, as the 2006 experience would be removed next year based on the existing 10-year average and would likely indicate the need for a large rate decrease next year for motorcycles.

The Corporation sought no change to permit and certificate rates, vehicle premium discounts and driver license premiums, service and transaction fees, fleet rebates or surcharges, or the $40.00 discount on approved after-market and manufacturer/dealer installed anti-theft devices.

A history of the percentage rate changes applied for by the Corporation and ordered by the Board is as follows:

Year	Applied For	Ordered
2017/18	4.3	3.7
2016/17	0.0	0.0
2015/16	3.4	3.4
2014/15	1.8	0.9
2013/14	0.0	0.0
2012/13	-6.8	-8.0
2011/12	-4.0	-4.0
2010/11	0.0	0.0
2009/10	-1.0	-1.0
2008/09	0.0	0.0
2007/08	-2.6	-2.6
2006/07	0.0	0.0
2005/06	0.0	-1.0
2004/05	2.5	3.7
2003/04	0.0	-1.0
2002/03	-1.2	0.0
2001/02	0.0	0.0

There have also been $597 million in premium rebates ordered by the Board over the last 15 years, as follows:

Year	Total ($ millions)	Percent of Premiums
2011	$336	45.0%
2008	$63	10.0%
2007	$60	10.0%
2006	$58	10.0%
2001	$80	16.6%

2. PROGRAM REVENUE

2.1. Basic Revenue Requirement

The Corporation derives revenue from four main sources to fund Basic: vehicle premiums, driver premiums, service and transaction fees and investment income. The Corporation's projected operating results for 2017/18 and 2018/19, the years impacted by the applied for 4.3% rate increase, are as follows:

	2017/18 Applied for Rate Per Application ($ millions)	2018/19 Projection Per Application ($ millions)
Motor Vehicle Premiums	**$938.0**	**$1,000.3**
Drivers' License Premiums	**51.6**	**54.0**
Reinsurance ceded	**(11.9)**	**(12.1)**
Total Net Premiums Earned	**977.8**	**1,042.2**
Investment Income	**36.3**	**25.7**
Service Fees & Other Revenues	**23.2**	**25.1**
Total Earned Revenues	**$1,037.4**	**$1,093.0**
Claims Incurred	**$757.1**	**$763.3**
Claims Expenses	**128.7**	**133.4**
Road Safety Expenses	**13.3**	**14.1**
Operating Expenses	**78.2**	**82.7**
Commissions	**37.7**	**40.1**
Premium Taxes	**29.7**	**31.6**
Regulatory/Appeal expenses	**3.5**	**3.6**
Total Claims and Expenses	**$1,048.2**	**$1,068.9**
Net income (loss) – Basic	**($10.8)**	**$24.1**

As indicated in Section 1 of this Order, MPI filed an updated interest rate forecast on a 50-50 basis as at August 2016. As a result of this updated forecast, Basic's projected net loss in 2017/18 will increase from $0.8 million to $10.8 million and its net result in 2018/19 will be a net income of $24.1 million.

2.2. Vehicle Premiums

Vehicle premiums earned are forecast to be $938.0 million in 2017/18, and to grow by over 6.6%, to $1,000.3 million, in 2018/19. The revenue earned by Basic in respect of vehicle premiums may change due to four factors: rate changes as ordered by the Board, growth in the number of vehicles in the fleet (the Volume Factor), changes in the average premium per vehicle caused by factors other than rate changes, such as the gradual upgrade of the fleet as older vehicles are replaced with newer ones (the Upgrade Factor), and the Driver Safety Rating (DSR) upgrade factor, which measures the impact on vehicle insurance premiums from changes in the average DSR level or registered vehicle owners.

The Volume Factor is based upon the historical growth rate of HTA (*The Highway Traffic Act*) vehicles only (including the private passenger, commercial, public and motorcycle major classes, and excluding trailers and off-road vehicles), which account for 77% of the fleet and over 98% of MPI's total Basic written premiums. MPI is forecasting Volume Factor growth to be 1.75% for each of 2017/18, 2018/19 and beyond. The Corporation is forecasting Upgrade Factor growth to be 2.79% based upon the average experience over the past five years.

The DSR upgrade is less significant than the vehicle upgrade and has been hovering at close to 0% over the past three years. In 2015/16 the DSR upgrade was -0.16% because of a large cohort of drivers that moved from DSR +14 to DSR +15, or from a 30% vehicle discount to a 33% vehicle discount.

The combined impact of the forecast premium revenue growth due to Volume Factor, Upgrade Factor and DSR upgrade factor is as follows:

Year	Vehicle Upgrade Factor	DSR Upgrade Factor	Total Upgrade Factor	Volume Factor	Total Volume & Upgrade Factor
2015/16 (Actual)	2.54%	(0.16%)	2.38%	1.54%	3.92%
2016/17	2.60%	0.08%	2.68%	1.75%	4.43%
2017/18	2.60%	0.22%	2.82%	1.75%	4.57%
2018/19	2.60%	0.11%	2.71%	1.75%	4.46%
2019/20	2.60%	0.18%	2.78%	1.75%	4.53%
2020/21	2.60%	0.19%	2.79%	1.75%	4.54%

2.3. Driver Premiums

When obtaining a driver's license, motorists are assessed a premium based on the principle that all drivers should contribute premiums to the insurance fund, regardless of whether they own or insure a vehicle. The level of Driver Premiums paid by licensed drivers is set based on the DSR scale which ranges from $15 (level 15) to $2,500 (level -20).

Driver Premiums are forecast to be $51.6 million in 2017/18 and to increase to $54.0 million in 2018/19, an increase of approximately $2.4 million. The forecast considers four components, including the number of earned driver units by DSR level, the expected movement of drivers on the DSR scale, the average number of earned driver units by DSR level and the driver premiums by DSR level.

2.4. Investment Income

The Corporation's funds available for investment are primarily the assets supporting the unearned premium reserves and unpaid claims reserves. The funds within the portfolio support both the payment of accident claims as well as the pension obligations of the Corporation. As at February 28, 2016, the Corporation had short and long-term investments, including cash and equities totalling $2.5 billion, forecast to grow to over $3.0 billion by 2020/21.

Investment income earned from the Corporation's investment portfolio reduces the revenue that it is required to collect through premiums. The Corporation's investment income is allocated between Basic, Extension and Special Risk Extension (SRE) lines of business based on the net average weighted equity balances between the lines of business. MPI realized $4.7 million loss in investment income in 2015/16, of which 85.3% or $4.0 million loss was allocated to Basic. A major contributor to the loss was MPI's $33.4 Million write-down of Canadian equity investments in the year, as well as a net losses of $61.5 million on its fixed income portfolio due primarily to changes in interest rates.

MPI is forecasting investment income in Basic of $90.8 million in 2016/17, and projects Basic investment income of $36.3 million in 2017/18 and $25.7 million in 2018/19. The variation in investment income is due primarily to the impact of changes in interest rates. Further discussion on MPI's investment portfolio and returns is found in Section 4.0 of this Order.

2.5. Service Fees and Other Revenues

Basic insurance earned $20.3 million in Service Fees and Other Revenues in 2015/16, and projects income of $21.6 million in 2016/17. This revenue is derived mainly from quarterly and monthly pre-authorized payment plans, late payment fees, motor vehicle transaction fees, dishonoured payment fees and pre-authorized payment default fees. The Corporation has advised that the level of service fees has not been reviewed in many years. The Corporation indicated that the vast majority of service fees are market based and are updated each year.

2.6. Interveners' Positions

CAC

CAC noted that MPI bears the onus of establishing that the rates for which it applies are just and reasonable pursuant to the applicable legislation, and as referenced by the Board in Order 98/14. CAC opposed the proposed rate increase of 4.3%, based in part on the 50-50 interest rate forecast. CAC challenged the evidentiary foundation for the 50-50 interest rate forecast, and submitted that the 50-50 interest rate forecast was not a best estimate. CAC asked that the Board set rates on the basis of accepted actuarial practice in Canada. The rate indication based on accepted actuarial practice being in the range of 4.8%, subtracting 1.0% for investments, and other amounts due to, what CAC characterized as, MPI's lack of running the Information Technology side of its business in a prudent, cost-effective, or reasonable manner. CAC argued for an actuarially-indicated rate somewhere in the range of or below 3%. In support of its position, CAC cited what it characterized as missed opportunities related to MPI's investment portfolio, and opportunities for more cost efficiency within the IT side of MPI's business.

CMMG

CMMG did not take a position on the overall rate request, but focussed on how the rate request would affect its members.

CMMG requested that the Board grant to the motorcycle class a rate decrease, rather than the increase requested by the Corporation. CMMG asked that the Board approve a 7.4% rate decrease for motorcycles, making the argument that that decrease would be in-line with the trend of motorcycle claims over the previous decade. CMMG referred to the decreases in motorcycle rates over the previous five years, given the improvement in motorcycle claims experience.

CMMG also referred to evidence indicating that to date, 2016 had seen improvements in motorcycle claims, and claims were lower than the historical average. CMMG further argued that had MPI based its previous years' rates on nine years of claims experience (as MPI has proposed for this Application), the historical motorcycle rates would have been reduced in prior years.

CAA

CAA emphasized its position that rates should be fair and reasonable, and that MPI should strive to achieve balanced and stable rates. Hail claims and losses caused by fluctuations in interest rates should be covered by reserves that have been built for such occurrences. CAA does not support the rate increase proposed by MPI, characterizing it as unreasonable and unfair.

BW

BW took no position on rates, given the scope of its intervention as set out in Section 1.1 above.

2.7. Board Findings

The Board does not approve the requested 4.3% overall rate change based on MPI's proposed IRFRF and 50-50 interest rate forecast. The Board finds that, given the inherent variability of forecasted net income, a rate indication that is heavily dependent on forecasting changes in interest rates that may or may not occur is not desirable. The Board hereby approves a 3.7% rate increase effective March 1, 2017, for all Major Classes combined. The approved rate increase is based on actuarially indicated rates as currently estimated by the Corporation. The Board approves MPI's request that there be no change in permit and certificate rates, driver license premiums and vehicle premium discounts, service and transaction fees, fleet rebates or surcharges, or the discount on approved after-market and manufacturer/dealer installed anti-theft devices. The Board approves the Corporation's one-time proposal for the motorcycle rate level indication to be based on using nine years of historical experience instead of the usual ten years.

As reported in Section 1, the Corporation filed updated information showing results different than those in the Application. Basic's projected net loss in 2017/18 will be affected positively by the $37.8 million in realized equity gains as of September 30, 2016, which are $19.7 million higher than forecasted for the year.

The Board's decision to order a 3.7% rate change is driven by the following factors:

- The Board finds that the Corporation has not established that the proposed 50-50 interest rate forecast is a best estimate, for reasons more fully discussed in Section 4.7. As a result, a rate indication based on the IRFRF of 2.3%, which incorporates the 50-50 interest rate forecast, has not been established as just and reasonable.

- The Board accepts that there remains uncertainty in how interest rates will change relative to the interest rate forecast underlying the Application.

- The Board finds that rate setting on the basis of actuarially indicated rates is less onerous for the Corporation, as it does not require forecasting quarterly changes in interest rates. The Board has explored with the Corporation the practice of ratemaking in accordance with accepted actuarial practice in this and in previous rate applications. It notes that setting rates on this basis is permitted by the legislative framework under which the Corporation operates and that the Corporation has not identified any barriers to it setting rates according to this method.

- Rate-setting on the basis of actuarially indicated rates is adopted practice with other Crown Corporation insurers, such as Saskatchewan Government Insurance (SGI), and Insurance Corporation of British Columbia (ICBC).

3. PROGRAM COSTS

The costs associated with providing Basic Insurance to Manitoba motorists fall into the following major categories:

	Total Estimated Expense 2017/18 ($ millions)	Percentage of Total Program Costs
Net Claims Incurred	**$757.1**	**72.2%**
Claims Expenses	**128.7**	**12.3**
Road Safety/Loss Prevention	**13.3**	**1.3**
Operating Expenses	**78.2**	**7.5**
Commissions	**37.7**	**3.6**
Premium Taxes	**29.7**	**2.8**
Regulatory/Appeal expenses [1]	**3.5**	**0.3**
Total Program Costs	**$1,048.2**	**100.0%**

3.1. Basic Claims Incurred

Claims Incurred represent the costs that are paid or forecast to be paid to claimants for the various benefits provided under the Basic Insurance program. Net Claims Incurred were $666.4 million in 2015/16, which was $77.5 million or 13.16% over the budget presented at last year's GRA. The Corporation cites the following as the key reasons for this significant variances:

- Higher than budgeted Comprehensive claims, an amount over budget of $52.7 million, due mainly to the frequency of hail claims, along with an increase in crime related claims and glass only claims.

- Higher than budgeted PIPP and Bodily Injury claims, in the amount of $31.4 million over budget.

- Interest rate impact over budget in the amount of $17.8 million due to low interest rates.

[1] Regulatory and appeal expenses relate to: Public Utilities Board, Crown Corporations Council and Automobile Injury Claims Appeal Commission.

- Unallocated and Internal Loss Adjustment expenses over budget in the amount of $12.2 million.

- Lower than budgeted Collision and Property Damage claims ($19.5 million under budget).

- Lower than budgeted Premium Deficiency and DPAC Write-Down ($15.0 million under budget).

- Change in Reinsurance ceded ($1.1 million under budget).

- Net effect of all other financial provisions with a $1.0 million favourable impact.

Claims Incurred for the fiscal years 2012 - 2016 for the major coverages were as follows:

For years ending February 28/29 ($ millions)	**2012**	**2013**	**2014**	**2015**	**2016**	**5 Year Change**	
Physical Damage - All Perils							
Collision	281	318	374	315	354	73	26%
Comprehensive	69	75	77	70	123	54	78%
Property damage	38	42	48	38	41	34	8%
Sub-total	**388**	**435**	**499**	**423**	**518**	**130**	**34%**
PIPP Accident Benefits	222	225	245	317	142	-80	-36%
Public Liability	2	1	3	6	6	4	200%
Total Claims Incurred	**612**	**661**	**747**	**746**	**666**	**54**	**9%**

Overall Total Claims Incurred were $666.4 million in 2015/16, and are forecast to be $776.8 million in 2016/17, $757.1 million in 2017/18 and to grow to $763.3 million in 2018/19, for an overall increase of $96.9 million from 2015/16.

A major component of Total Claims Incurred are Collision claims costs, which were $353.1 million in 2015/16. MPI indicated that, due to the mild winter, collisions during the winter were at a historical low with the collision frequency experienced from November 2015 through February 2016 being 18% below the ten years average.The Corporation does not believe the recent past experience is representative of a long term best estimate for forecasting assumptions. MPI is forecasting collision frequency based on a five year average for 2016/17, followed by a decline in the frequency trend by .5% to represent long term averages. Although MPI is forecasting a reduction in the number of claims, it is forecasting growth in collision costs due to increases in the replacement cost of vehicles and increasing repair costs, due in part to the USD:CDN exchange rates with a weaker Canadian dollar. MPI is forecasting collision costs to be $392.8 million in 2016/17, and are projected to grow to $418.2 million in 2017/18, and $446.1 million in 2018/19, for an overall increase of $93 million from 2015/16. The Corporation has stated collision total loss frequency has been increasing over the past decade and indicated an increase in the number of parts required per repair that impacts both material and labour costs. The Corporation has indicated the increase in recent years has been caused by an increase in import versus domestic vehicles being repaired.

The Corporation has also advised that significant changes in vehicle manufacturing and repair industries are continuing, as MPI is transitioning to a “new normal” with the Physical Damage Re-Engineering (PDR) program. The new normal is the uncertainty of the transition towards vehicles with more complex parts, autonomous vehicles, collision avoidance technology and a digitized economy. Those fundamental changes get to the heart of the product that is being offered by the Corporation, and therefore bring significant uncertainty, inviting prudence.

The largest component of Total Claims Incurred is Accident Benefits which are payable to claimants regardless of fault for a collision, including Medical Expenses, Rehabilitation Expenses, Funeral Expense Reimbursement, Death Payments, Impairment Benefits, Income Replacement Indemnity and Personal Care Assistance expenses. The estimated cost of Accident Benefits under the PIPP program are updated based upon actuarial reserving practices taking into account changes in interest rates on long term claims liabilities.

The following table compares actual PIPP Accident Benefit costs with those previously forecast by the Corporation:

Year Ended February 28/29	Original Forecast	Revised Forecast	Actual Cost	Difference Original/ Actual
2008	$237.3	$231.3	$167.2	$70.1
2009	$242.1	$239.3	$186.1	$56.0
2010	$249.8	$236.2	$175.0	$74.8
2011	$252.9	$244.6	($59.7)	($312.6)
2012	$253.3	$197.3	$222.8	($30.5)
2013	$203.5	$204.2	$224.2	($20.7)
2014	$210.9	$208.5	$243.9	($33.0)
2015	$184.4	$148.9	$314.5	($130.1)
2016	$166.1	$90.6	$143.0	$23.1

The Corporation has stated that over the forecast period, the net claims incurred forecast is significantly impacted as a result of the assumed increase in interest rates. By including interest rate impacts, net claims incurred is reduced by $33.6 million in 2017/18 lower and by $78.7 million lower in 2018/19.

Current fiscal period Claims Incurred are affected by the current year's claims activity, as well as prior years' claims activity. When a claim is first incurred, claims adjusters make an estimate of the ultimate cost of that claim. Over time, as more is learned about the nature of the underlying injury, and as partial claim payments are made, adjustments are made to that prior estimate of ultimate cost of the claim. These adjustments, sometimes called "runoff", flow through Claims Incurred in the fiscal year in which the adjustments are made.

3.2. Basic Expenses Overview

The Corporation categorizes its operating expenses into three groups: Normal Operations Expenses, Improvement Initiative Implementation Expenses, and Improvement Initiative Ongoing Expenses. Normal Operations Expenses are incurred to manage the day to day operations of the Corporation. Improvement Initiative Implementation Expenses represent one-time expenses to implement IT projects, examples of which include software and hardware purchases and external labour. Improvement Initiative Ongoing Expenses are the expenses that occur as a result of a project that continues after the project has been put into service.

Examples include licensing costs for purchased software, future maintenance on hardware purchases, and amortization related to deferred development.

All three types of operating expenses incurred by the Corporation are allocated to Basic pursuant to a cost allocation methodology approved by the Board previously, and are assigned to four expense categories: Claims, Road Safety/Loss Prevention, Operating and Regulatory/Appeal.

Staff compensation made up 59% of the Corporation's total expenses, and is the predominant expenditure within Claims and Operating expenses.

The details of Basic Operating expenses are as follows:

	For the Years Ended February 28/29 ($ millions)				
	2015A	**2016A**	**2017P**	**2018P**	**2019P**
Total Corporate Expenses	**$273.8**	**$275.3**	**$293.5**	**$308.9**	**$313.9**
Basic Allocated Corporate Expenses					
Claims Expense	116.6	118.6	125.2	128.3	132.7
Road Safety/Loss Prevention	11.4	13.0	13.3	13.2	14.1
Operating	74.3	71.6	76.9	78.0	82.3
Regulatory/Appeal	3.9	3.7	3.4	3.5	3.6
Total Basic Allocated Corporate Expenses	**$206.2**	**$206.9**	**$218.8**	**$223.0**	**$232.7**
Percentage of Corporate Operating Expenses	75.3%	75.2%	74.6%	72.2%	74.1%

3.3. Claims Expenses

Claims Expenses represent the administrative costs associated with processing and settling claims, and account for approximately 12% of Basic program costs. Claims expenses have grown from $116.6 million in 2014/15 to $118.6 million in 2015/16, are budgeted to be $125.3 million in 2016/17, and are forecast to grow to $132.7 million in 2018/19, a five-year increase of $16.1 million, or 14%. The main drivers of these increases are the Corporation's Compensation expenses including salaries, overtime, benefits and health & education tax.

3.4. Operating Expenses

Operating expenses allocated to Basic have grown from $71.6 million in 2015/16 to a forecast of $76.9 million in 2016/17, $78.0 million in 2017/18 and $82.3 million in 2018/19, an increase of 15% over the four year period. The Corporation has stated that, through its Innovation and Cost Containment Committee, it has reduced the 2017/18 and 2018/19 budget for operating expenses by $8.0 million, comprised of the following:

- Reduction in compensation in the amount of $4.3 million:
    - A reduction of five staff through attrition, due to the repurposing of the Pembina Highway Service Centre.
    - A reduction of 25 staff through attrition, due to the implementation of the PDR project.
    - A reduction of 15 full time equivalent positions (FTE) through attrition in normal operations.
- Postage reduction in the amount of $1.1 million.
- IBM Data Center Operations reduction of $2.5 million.

MPI includes the budgeted savings in its operating budgets. MPI does not review whether targeted savings were achieved, but reviews actual total results against budgets to assess whether savings have been achieved.

Compensation represents 59% of total operating costs. Total compensation grew by a compounded annual growth rate of 3.0% between 2012/13 and 2015/16, and is forecast to increase to 2.0% through 2018/19. Compensation has grown from $109.0 million in 2012/13, to $122.2 million in 2015/16. Salaries and benefits are forecast to be $126.1 million in 2016/17and are projected to be $128.9 million in 2017/18 and $129.8 million in 2018/19.

MPI is now forecasting an increase in compensation expenses (net of vacancy allowance) of 3.37% in 2016/17 and an increase of 2.9% in 2017/18, which are in excess of inflation. The Collective Agreement between MPI and the Manitoba Government and General Employees' Union (MGEU), which covers 90% of MPI's workforce, includes general economic increases of

2.0% for year one, 1.5% for year two, and a 2.0% increase for years three to five. The five-year contract is in effect for the period from September 18, 2016 to September 26, 2020.

In addition to the economic increase, the Collective Agreement also specifies a pay plan with six "step" salary ranges for each in-scope position in the Corporation. The employee of a position will be eligible for up to five annual 3.5% increases until they reach the maximum salary (step) for the position. Upon reaching the maximum salary, the employee will only be eligible to receive a general economic wage increase. MPI estimates that 50% of its employees are eligible for these annual "step" increases, which is the equivalent of an overall additional 1.75% annual wage increase. As a result of these two contractual requirements, MPI is forecasting an annual increase in compensation of 3.75% for 2016/17.

MPI's total Corporate staff complement has decreased, from 1,946.8 FTE in 2009/10 to 1,882.4 in 2015/16, and is forecast to grow to 1,956.2 FTE in 2016/17. The composition of MPI's staffing dedicated to operations and special initiatives is as follows:

Year	Normal Operations	Special Initiatives	Total Corporate
2009/10	1,752.9	193.9	1,946.8
2010/11	1,822.8	48.6	1,871.4
2011/12	1,862.9	15.4	1,878.3
2012/13	1,894.7	17.1	1,911.8
2013/14	1,890.3	15.0	1,905.3
2014/15	1,874.8	10.7	1,885.4
2015/16 Actual	1,866.7	15.7	1,882.4
2016/17 Budget	1,927.5	28.7	1,956.2

MPI's Normal Operations staffing levels increased from 1,752.9 FTE in 2009/10 to 1,866.7 in 2015/16, including increased IT personnel pursuant to Board Order 128/15. MPI committed to a permanent staffing reduction of 15 FTE in 2017/18 through attrition, which will give rise to an annualized savings of $0.9 million once completed. Taking into account targeted staff reductions, the Corporation is budgeting for 1,927.5 FTE in 2016/17 and 1,912.5 FTE in 2017/18 and 1,882.5 FTE each subsequent year through 2020/21.

MPI's actual Normal Operations staffing levels have been consistently below budgets as follows:

Fiscal Year	Actual	Budget	Over/(Under) Variance
2008/09	1,732.9	1,796.3	(63.4)
2009/10	1,752.9	1,783.8	(30.9)
2010/11	1,822.8	1,850.1	(27.3)
2011/12	1,862.9	1,926.5	(63.6)
2012/13	1,894.7	1,936.7	(42.0)
2013/14	1,890.3	1,934.7	(44.4)
2014/15	1,874.8	1,927.7	(52.9)
2015/16	1,866.7	1,898.7	(32.0)
2016/17 Budget		1,927.5	

The consistent under budget variance is a reflection of the Corporation's Vacancy Management Program, which is used as a means to control costs. The Corporation has stated that at a given time, there are vacant positions within its staff complement, referred to as a vacancy provision, which reduces salary expenses. The vacancy provision is based on a targeted amount of dollars and not based specifically on certain positions and salaries, as the positions and salaries vary year over year. The savings from vacancies were determined to be approximately $6 million per year, which was the budgeted amount established for 2015/16. This amount is then forecast to grow based on expected economic and steps in scale salary increases, which results in the Corporation budgeting for a vacancy allowance of $6.2 million in 2016/17, $6.4 million in 2017/18, and $6.7 million in 2018/19.

MPI has budgeted salaries of $136.4 million in 2016/17 and $140.4 million for 2017/18, which reflects the full 1,927.5 FTE staff complement. This budgeted amount was reduced by the vacancy allowance, to net budgeted salaries of $130.2 million in 2016/17 and $134 million in 2017/18. MPI intends to manage within its net staffing budget to contain cost growth. MPI indicated that the vacancy allowance is typically based on the turnover of staff, frontline and other. MPI advised that it is not grossing up the salary budget beyond what it anticipates will be its actual spending in a year. The Corporation looked at the gross salary budget and reduced it by the vacancy allowance, on an overall basis, to reflect what MPI anticipates will be the actual salary expenditures in a given year.

In addition, MPI indicated that management continues to incorporate a performance objective of managing its departmental budgets and seeking opportunities to contain and reduce operating expenses. Budgets are reviewed monthly, and possible variances are investigated at the earliest possible stage and managed proactively. The Corporation advised that innovative strategies and processes will continue to be identified in order to contain and/or reduce corporate operating expenses.

3.5. Information Technology Expenses

MPI's total Corporate IT expenses, including operating expenses and capital projects, have increased from $50.9 million in 2011/12 to $74.0 million in 2015/16, representing a compounded annual growth rate of 6.4%. IT expenses are forecast to be $84.5 million in 2016/17 and to increase to $99.5 million in 2020/21, representing a compounded annual growth rate of 7.2%.

Over the last number of years, MPI has pursued IT capital projects targeted towards modernizing its IT infrastructure, including the following initiatives: Data Centre Optimization, IT Optimization, Driving Ahead in Real Time (DART), Information Security Strategy, Broker Refresh, PDR, Human Resource Management System (HRMS), as well as other initiatives. This year, MPI provided detailed information on the PDR and IT Modernization projects, including Gartner's PDR Evaluation Report and Terms of Reference for the PDR project, and the Program Financial budget for the IT Modernization project.

MPI's largest current major capital IT initiative is the PDR Project. The strategy of the PDR Project is to employ a distributed enterprise model whereby MPI embeds technology into repair facilities to work collaboratively in streamlining collision repair processes in order to realize claims cost savings. Originally the PDR project was to be completed in 2017 but was reported last year to be delayed to 2020 due to changes in scope and direction to the project. MPI estimates that the PDR Project cost remains unchanged at $65 million (based on 2012 dollars), and is now expected to be completed in 2021, which is a further one-year delay.

In Board Order 128/15, the Board directed MPI to file an independent assessment on the development and roll-out of the PDR Project, including the progress of the pilots, the timing of full implementation, the costs of the project and the anticipated savings to be derived. In response, MPI filed a report prepared by the Gartner Group, entitled Physical Damage Re-Engineering (PDR) Program Evaluation.

Martin Geffen of Gartner Group appeared as a witness called by MPI in the hearings, and addressed Gartner Group's PDR Program Evaluation, and the CIO Scorecard and Infrastructure Benchmark (CIO Scorecard). Mr. Geffen is a Vice President of Gartner Group and provides consulting services in the areas of technology planning, architecture, design and implementation issues. Mr. Geffen was qualified to testify as an expert in the area of the use and planning of information technology, and information technology governance.

As indicated by Mr. Geffen, Gartner had found that the overall total budget of the PDR Project had not been changed, but that costs had been reallocated among various components of the projects. Of the budget, $32.8 million, or 50%, had been spent on the project. Mr. Geffen noted that Gartner has found that, in programs as large and complex as the PDR project, it is not unexpected to have a course correction, because at the outset of a project it is not unusual for an organization to expect to progress more quickly with a project than is the reality.

With respect to the savings and benefits of the PDR project, Mr. Geffen noted that Gartner had determined the net present value benefit overall of the project of $18 million. The cost/benefit analysis conducted by Gartner did not include the cost of maintaining the program. Gartner estimated the maintenance cost, based on industry standards, to be 18 to 20% per annum.

In the 2016 GRA, the Corporation advised the Board that it was budgeting for IT Modernization costs of $33.3 million over the next four years, to ensure its existing systems are fully supported. MPI revised the budget in this Application, to $40 million. MPI has advised that there will be no formal project charter for this project and that it will provide further detail of the nature of the spending when budgets become more formalized. To date, no quantified financial benefits for this project have been identified, as it is primarily designed to maintain the current IT assets and avoid significant future costs.

MPI utilizes both internal FTEs and external consultants to maintain MPI's IT systems and deliver on IT capital projects. MPI's IT actual and forecast staffing levels including consultants are as follows:

IT Staff Complement (FTE)

	Actual					Forecast		
Year Ended February 28/29	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
Internal FTE	215	227	212	210	223	236*	249*	251*
Consultants	98	129	120	110	114	116	107	91
Total	313	356	332	320	336	352	356	342
% IT Consultants	31%	36%	36%	34%	34%	33%	30%	27%

* rounded.

In Board Order 128/15, the Board directed MPI to assess opportunities for savings relative to external IT consultants, including bringing consultants in-house. In response to this directive, the Corporation advised the Board that MPI made a conscious effort to reduce the number of external consultants eventually, by replacing them with permanent IT staff. MPI undertook a comprehensive review to develop an approach that optimizes the use of internal and external resources. The proposed approach, to transition up to 27 positions from external resources to internal staff over the next three years, is expected to achieve $2.4 million annual recurring cost savings in 2019/20. MPI indicated that it has internalized 12 IT positions previously filled by consultants in 2016/17.

Mr. Geffen, in his testimony, also explained what he would consider challenges to MPI's ability to employ IT staff internally as opposed to relying on IT consultants. First, he indicated that skilled IT resources are very difficult to acquire in the marketplace. In addition, organizations are often looking for flexibility to be able to ramp up skills and experience to address needs of a specific project, or on a term basis. Lastly, based on compensation structures, some organizations cannot attract resources to carry out the specific roles and responsibilities. The solution is to go out and contract those types of resources when they are needed on staff.

3.6. Benchmarking

MPI has acknowledged the importance of benchmarking to identify improvement opportunities for managing expenses and the efficiencies of its operations to move forward successfully. The Corporation again filed with the Board its benchmarking framework reflecting four subject areas: Operational Efficiency, IT Service Delivery, Serving Manitobans, and Community Impact. MPI uses the benchmarking results to identify opportunities to reduce costs, effective management approaches, and efficient resource allocation.

In Order 135/14, the Board ordered that MPI file in the 2016 GRA:

> 11.5 - An update on the claim duration issue including whether pre-BI^3 benchmarks are being achieved, and when post-BI^3 benchmarks will be implemented and what those benchmarks will be; and
>
> 11.6 - An external, independent review of the management and oversight of PIPP claims in the context of post-BI^3 implementation, to learn whether the initiative is providing the desired impact.

As stated in Order 128/15, MPI indicated last year that it was not in a position to fully comply with the above directives and advised that an external, independent review of the management and oversight of PIPP claims in the context of post-BI^3 implementation would take two years to complete. The Corporation stated that a review of the management and oversight of PIPP claims at this time would be non-conclusive given that BI^3 at that time would not be fully implemented for another two years. A full review would be considered at that time.

As also stated in Order 128/15, the Corporation advised that as BI^3 was implemented in September 2010 and, at that time was entering its fifth (now sixth) year post-implementation, it was too early to finalize post-BI^3 benchmarks as open post-BI^3 claims are not yet fully developed. MPI stated that the BI^3 business case indicated that it will take at least seven years for the initiative to be fully functioning and achieving desired outcomes.

In Order 128/15, the Board had directed MPI to seek to gain insight on longer tail experience from outside the Province of Manitoba, and in particular, from the Société de l'assurance automobile du Québec (SAAQ). The Corporation advised that it did not undertake the review as directed, and has indicated that it will conduct a review of mortality assumptions in the coming year, on the assumption that SGI and SAAQ are willing to share their mortality experience with the Corporation.

MPI engaged the Ward Group to provide an independent perspective on how the Corporation compares to other companies, identify and prioritize improvement opportunities, set performance expectations and monitor performance. Ward identified the most meaningful indicators of operational efficiency for corporate performance and claims performance.

The Ward Group's 2014/15 comparison that the Corporation's total gross expenses, both as a percentage of gross premiums written and per policy in force, are below the comparators including the Canadian Personal Auto Group (which includes two public insurers), the Canadian Benchmark Group (which includes two public insurers) and the U.S. Personal Auto Group. MPI compared well on several different metrics against peer groups. MPI's performance on FTEs per $100 million of Gross Premiums Written (GPW) has improved since 2011/12 moving from $150.6 to $140.4 in 2014/15, yet remains materially higher than its peers.

MPI filed a benchmarking study relative to its 2014/15 IT expenditures, including the CIO Scorecard prepared by the Gartner Group, reflecting benchmarking of various elements of IT costs. Mr. Geffen provided testimony at the hearings on the CIO Scorecard, and commented that MPI had improved its overall IT maturity: seven of eight of its measures were as good or better than its peers, and in only one area, business process management, was MPI below its peers. To improve business process management, Mr. Geffen suggested that the use of workflow technologies or analytics technologies for process management will assess inefficiencies of a business process. In his view, increasingly efficient business process would drive down costs.

Gartner's CIO Scorecard report also showed that MPI spends 63% of its IT budget on personnel, versus 44% among its peers. Mr. Geffen, in his testimony, explained that the variance was attributable to the fact that 34% of MPI's IT staff is made up contractors, and among its peer group, 17% is comprised of IT contractors.

Mr. Geffen testified that Gartner will be finalizing its review of 2015/16 IT spending this fall. The Board anticipates that the results of Gartner's review will be filed in the 2018 GRA.

Gartner has, in recent years, made a series of recommendations to MPI, several of which MPI has adopted and/or are in the process of being implemented, while others remain to be evaluated. In particular, two recommendations from 2015 have been rearticulated in Gartner's most recent evaluation and read as follows:

> 3.05 Plan the future state architecture to support MPI's goals of access and support for existing and new services; and
>
> 3.06 Perform a baseline of the current, and perform gap analyses as the architecture is implemented.

The Corporation stated that it is continuing to work towards evaluation and implementation of many of Gartner's outstanding recommendations. It has also indicated that it will be evaluating the above two recommendations in the current year.

3.7. Interveners' Positions

CAC

CAC commented upon the prudence and reasonableness of the Corporation's spending on initiatives with significant IT components, including BI^3, PDR, and the Financial Re-Engineering Project. CAC also provided comments on the Corporation's staffing on IT and the findings in the Gartner Group evaluations of IT and the PDR project.

CAC recommended that the Board make certain findings regarding the Corporation's IT expenditures: first, that IT staffing and capital expenditures have been a significant driver of current and future cost pressures on the Corporation; and second, that significant challenges still exist regarding the rollout of BI^3. CAC characterized some of those challenges as follows:

- One of the three drivers of the budget variance in 2015/16 was higher non-interest-related adverse developments related to PIPP, in the range of $34 to $35 million.

- The Corporation is six years in to BI^3, which created profound changes in reserving practices in four areas: initial reserves, subsequent reserves to align with rehabilitation planning, step reserving after 24 months, and the reserving calculator.

- BI^3 case reserves do not reflect its exposure, and the duration benchmarks exceed pre-BI^3 benchmarks.

- The primary savings from BI^3 were to flow from leakage savings, based in large part on the duration expectations. BI^3 reserve practices may not fully reflect the risk exposure.

With respect to PDR, CAC referred to the Corporation's statement that the project would generate leakage costs as well. The experience with BI^3 to date should inform the Board on the likelihood of savings generated by PDR. CAC also asked the Board to find that the original design of PDR failed to follow the value management gatekeeping process, which was not in place at the outset of the project. CAC observed what it characterized as continuing significant risks associated with PDR:

- The First Notification of Loss (FNOL) and advanced analytics, technologies which are central to the PDR project, are not mature technologies.

- Whether the oversight approach based on advanced analytics will be effective, given a different business model: previously, most estimating was done by the Corporation initially; this will change with distributed estimating, which is anticipated to take place with 70-75% of estimates.

- Concentration within the industry, which could affect MPI's negotiating power.

CAC also commented on the compound annual growth rate of the amortization expense for the Technology Innovation, Technology Risk Management, and PDR. CAC argued that the increase in the annual growth rate from 2.5% in the 2016 GRA to 7.5% out to 2020/21 in the Application was an indication that IT is putting pressure on rates. In addition, CAC referenced the information from Gartner that the number of FTE staff in IT increased by 6.4% compounded year over year, between 2010/11 and 2014/15, and that MPI is spending more on IT FTEs than its peers. CAC argued that MPI relies on a disproportionate amount of contractors for IT. Reasonable and prudent IT management would include: (1) good gatekeeping that would be established prior to spending; (2) mature benefits realization metrics which would include an understanding of a baseline; and (3) the use of business cases to justify IT spending. It stated that there is a lack of financial metrics in business cases, against which MPI can assess new IT projects. As an example, the business charter related to the Financial Re-Engineering Project does not contain financial metrics. CAC stated that an adverse inference must be drawn as a result of what it characterized as MPI's failure to justify the business case for its IT portfolio. CAC argued that the Board cannot have confidence in the cost/benefit analysis that has been supplied in support of the PDR. For example, the cost/benefit analysis performed by Gartner did not take into account the costs for maintaining the system. There should be an analysis of total cost of ownership of the program. CAC also made a number of recommendations regarding MPI's IT expenses.

CAC also stated that, in its view, there remain unresolved issues within MPI's claims forecasting, which issues have given rise to a long-standing source of instability in rate-setting for Basic. MPI should base claims forecasts on accident year trends rather than on fiscal year trends. CAC reiterated its recommendation from the 2016 GRA, that MPI should seek to gain insight on longer tail experience from outside, and in particular from SAAQ. CAC recommended that the Board require MPI to report back on its consultations, in terms of terminations and long-term claimants, including implications for liabilities and forecasts. This would assist in understanding the data which indicate that terminations are earlier than MPI has expected.

3.8. Board Findings

The Board has in the past characterized one of the key elements of its independent review function and rate-setting role as ensuring that actual and projected costs incurred are necessary and prudent, in the context of setting just and reasonable Basic rates. The Board's jurisdiction to do so is derived from *The Crown Corporations Public Review and Accountability Act*, and in particular, s. 26 thereof.

With respect to compensation, the Board recognizes that the collective agreement into which the Corporation entered with the MGEU in September 2016 will continue to be a driver of cost increases, and that staff will receive step in scale increases as they gain seniority and progress in their employment by MPI. The Board acknowledges MPI’s efforts in internalizing IT staff and that long term savings will be realized from this approach. The Board directs the Corporation to continue its efforts to find further savings beyond the over $9 million identified in 2017/18 and 2018/19. The Board orders that MPI include in next year's GRA filing an update with respect to additional cost containment efforts relative to staffing levels and compensation expenses.

The Board understands that MPI uses a vacancy allowance mechanism to demonstrate its control on staffing levels. The Board finds the actual 2016/17 staffing level should form the basis of budgeting staffing levels for next GRA. The Board directs that in the 2018 GRA, MPI provide a zero based budget for staffing, using that actual figure as a starting point for forecasting purposes. The Board directs MPI to demonstrate the targeted staffing level reductions identified by the Corporation on that basis.

The Board notes that MPI does not specifically track targeted savings embedded in the overall operating budgets. To assess whether the actual targeted savings has been realized, MPI relies on an overall budget to actual comparisons. The Board finds that relying on overall budget attainment does not represent effective control over targeted costs, as other either savings or cost overruns could impact a global comparison. To improve transparency of operating expense control efforts, the Board directs MPI, in the 2018 GRA, to report on specific targeted savings forecast in the Application and compare with actual results to allow the Board to assess how MPI has controlled budgeted costs.

The Board remains concerned about MPI's costs relative to both the level of IT staff and the level of external IT consultants. The Board notes that Gartner has observed that MPI’s overall personnel spending and staffing are higher than peers. As MPI increases its use of third-party support for infrastructure services, it should review the size of its retained staff.

The Board directs MPI to assess further opportunities for savings relative to external IT consultants, including a review of whether further savings can be achieved by bringing any of those consultants in-house and optimizing IT staffing levels in general. The Board orders that MPI file the results of its IT in-sourcing efforts at next year's GRA.

In Order 151/13, the Board had ordered that MPI file, in the 2015 GRA, a five-year IT strategic plan, including a cost-benefit analysis, justifying its current and future IT expenditures. MPI did not file a strategic plan in the 2015 GRA, but rather, advised the Board that the Corporation’s IT strategy is integrated with its overall business strategy. The Board then required, in Order 135/14, that MPI file in the 2016 GRA, any reports generated relative to its vision and strategy development exercises. This was not done. The Board highlights this history to note that the Board continues to express concern about cost overruns with respect to IT expenditures. The Board finds there is a lack of business cases in the IT area.

The Corporation's plan for IT Modernization spending has increased to $40 million over the next four years from the associated cost reported in the 2016 GRA, which was $33.3 million. The Board understands that the scope of the PDR has changed with reduced functionality, yet there is no change in the overall budget. The Board orders an update to the Gartner report on the project be filed at the next GRA. The Board remains concerned that a complex multi-year project has the potential to run over budget unless appropriately managed.

Given the Board's concern with the potential for cost overruns and the lack of business cases in the IT area, the Board directs that in the 2018 GRA, MPI file an overall five-year strategic plan with respect to its IT projects. The plan shall include all major projects, including the IT Modernization and PDR projects, full business cases with cost/benefit financial metrics for each of the projects, shall clearly articulate the benefits of the projects, and provide updates on their progress to implementation.

The Board appreciated the in-camera briefing provided on the distributed estimating pilot. The Board directs MPI to provide an updated briefing on that and any other pilot of this multi-pronged project at the next GRA, to take place no later than May 31, 2017, given the significant expected PDR Project cost and the delay reported by the Corporation.

The Board points out that the Corporation did not comply with last year's directive requiring MPI to seek to gain outside insight on longer tail experience. As such, the Board again orders that MPI seek insight on longer tail experience from outside, and in particular from SAAQ. The Board also directs MPI to provide a full set of preliminary benchmarks to assess the performance of BI[3] for the Board's review at the next GRA.

4. INVESTMENTS

4.1. Investment Portfolio

As reflected in Section 2.4 above, the funds available for investment by the Corporation are primarily the assets supporting the unearned premium reserves and unpaid claims reserves. The Corporation's overall investment portfolio was over $2.5 billion as at February 28, 2016. Management of MPI's assets must be done in accordance with the Investment Policy Statement approved by its Board of Directors.

The recent actual and forecast composition of the Basic investment portfolio is summarized below:

Basic Investment Portfolio				
	2015/16 Actual		**2016/17 Forecast**	
	Ending Asset Values (C$ millions)	**Portfolio Composition**	**Ending Asset Values (C$ millions)**	**Portfolio Composition**
Cash/Short Term Investments	37	1.5%	-	0.0%
Canadian Fixed Income	1,056	41.6%	1,178	44.6%
MUSH Non-Marketable Bonds*	623	24.6%	644	24.4%
Total Long Term Bonds	**$1,716**	**67.7%**	**$1,822**	**69.0%**
Canadian Equities	302	11.9%	274	10.4%
US Equities	167	6.6%	155	5.9%
Real Estate	264	10.4%	277	10.5%
Infrastructure & Venture Capital	85	3.4%	112	4.3%
Total	**$2,535**	**100.0%**	**$2,640**	**100.0%**

** MUSH bonds are Manitoba rural municipality, school division and healthcare facility bonds and debentures which are not tradable in the fixed income market. MUSH bonds are held at book value and the portfolio's value does not vary with changes in interest rates.*

In Order 151/13, the Board expressed concern over the composition of MPI's investment portfolio, noting the size of the portfolio and changes in the interest rate environment during the previous five years. The Board ordered MPI to have the composition of its investment portfolio reviewed by an external expert consultant, with a view to determining whether the current asset mix should continue, or should be revised. The Board stated also that the review should encompass an examination that generated recommendations for improving the management of the portfolio, including strategies to manage the volatility of the portfolio, one of the major risks faced by the Corporation.

MPI retained AON Hewitt (AON) to undertake an Asset Liability Management Study (ALM Study) and advise whether the current asset mix and duration matching strategy should continue, or should be revised. The ALM Study was filed in the 2016 GRA, and led to two main outcomes. First, the Corporation's target asset allocation was changed from 60% fixed income / 20% equities / 20% alternatives (real estate and infrastructure) to 70% fixed income / 15% equities / 15% alternatives. MPI implemented the new portfolio targets last year. The range of investments as is set out in the Investment Policy Statement is as follows:

Asset Class	Minimum	Target	Maximum
Cash and Short Term	0%	0%	5%
Marketable Bonds	40%	50%	60%
MUSH	15%	20%	25%
Total Bonds	**60%**	**70%**	**80%**
Canadian Equities (85% Large Cap and 15% Small Cap)	7%	10%	13%
U.S. Equities (80% Large Cap and 20% Small Cap)	3%	5%	7%
Total Equities	**10%**	**15%**	**20%**
Canadian Direct Real Estate	7%	10%	15%
Direct Infrastructure	2%	5%	8%
		100%	

The second aspect of the ALM study, relating to duration matching, is discussed in Section 4.4 below.

4.2. Investment Management

Basic premiums are not set to fully recover claims costs; rather, MPI typically depends on investment income to break even. MPI’s substantial investment portfolio is managed jointly by the Corporation and the Province of Manitoba, through a committee known as the Investment Committee Working Group (ICWG), which is co-chaired by MPI's Vice President of Finance and Chief Financial Officer, and a representative from the Department of Finance.

The ICWG provides support and advice to the Minister of Finance with respect to MPI's investments, including with respect to MPI investment strategies. The ICWG seeks consensus between the Department of Finance and MPI on recommendations to be provided to the Minister of Finance on investment decisions but the ultimate responsibility for the portfolio rests with the Minister of Finance. MPI submits that neither MPI, nor the PUB, can unilaterally direct investment strategy.

4.3. Investment Returns

MPI realized a $4.7 million loss in investment income in 2015/16, of which Basic's share was 85.35% totaling a $4.0 million loss. Investment income was negatively impacted due to $52.5 million in losses in marketable bonds and a write-down in Canadian equities, totaling $33.4 million of which $28.5 million was allocated to Basic. The marketable bond portfolio is sensitive to changes in interest rates, and MPI's projected returns for Basic investment income have changed materially since last year's application, due primarily to interest rate forecast changes, as follows:

Basic Investment Income ($ millions)				
	2015/16	**2016/17**	**2017/18**	**2018/19**
2017 GRA	($4.0)	$90.8	$36.3	$25.7
2016 GRA	($10.8)	$12.8	$12.9	$100.4
Difference	$6.8	$78.0	$23.4	($74.7)

These variances are attributed primarily to changes in projected realized and unrealized gains and losses in the marketable bond portfolio, due to the revised 50-50 interest rate forecast. If the impact of changing interest rates was excluded, Basic investment income would have been $48.5 million in 2015/16 as opposed to a loss of $4.0 million, and forecast at approximately $79.4 million in 2016/17. Over the rating years (2017/18 and 2018/19), Basic investment income is forecast at $36.3 million and $25.7 million. The low investment income is negatively impacted by the forecasted losses of $37.1 million in 2017/18, and $71.7 million in 2018/19 on the marketable bond portfolio. The losses are attributable to the forecast of rising interest rates. The subject of interest rate risk is addressed in a later section.

In Order 128/15, the Board requested a comparison of investment returns with other entities in Manitoba. The Board stated:

> *The Board notes that there are other entities in Manitoba with substantial investment portfolios under the control of the Government of Manitoba, such as the Workers' Compensation Board, the Teachers' Retirement Allowances Fund and the Civil Service Superannuation Board of Manitoba. The Board orders MPI to prepare and file at next year's GRA a study with respect to the composition and performance of the investment portfolios of each of those entities for review.*

Based on the comparison, MPI's investment portfolio earned a return of 2.5% in 2015, while the average of the returns earned by the Teachers' Retirement Allowances Fund (TRAF), the Civil Service Superannuation Board of Manitoba (CSSB) and the Workers' Compensation Board (WCB) was 7.9%. MPI attributed 2.5 percentage points of the 5.4 percentage points difference to the difference in asset allocations. MPI indicated that the 3 percentage points remaining underperformance represented about $12.1 million in lower investment income returns for 2015.

MPI indicated CSSB and TRAF are pension plans, which have a much longer investment time horizon due to their very long duration liabilities. As a result, these organizations are able to take more investment risk and have a much higher allocation to equities than MPI. Over the last ten years MPI's portfolio has underperformed CSSB by 0.4%, WCB by 1.2% and TRAF by 1.7%. MPI indicated that adjusting the asset allocations of CSSB, TRAF and WCB similar to that of MPI's allocation would reduce or potentially eliminate the difference in performance between MPI and those organizations.

4.4. Interest Rate Risk

MPI submitted that the objective of reducing exposure to interest rate movement is key for a property and casualty insurer like MPI. In the absence of MPI's actions to match liabilities, MPI would face significant risk of financial losses. Small changes in interest rates have had a significant impact upon investment income. MPI's investment portfolio is weighted heavily to long-term bonds. A large portion of the bonds are marketable, which means investment returns can be impacted materially by changes in interest rates. In particular, if interest rates increase, marketable bond values fall, as do the discounted value of the claim liabilities. If interest rates decrease, bond values and claims liabilities increase. The effect of these changes can, to a large extent, largely offset each other if managed appropriately so that the net impact on financial results is neutralized. The situation is complicated by the presence of the MUSH bonds which also support the claims liabilities but are not interest rate sensitive.

In Order 151/13, the Board directed MPI to have the composition of its investment portfolio reviewed by an external expert consultant, with a view to determining whether the current asset mix should continue, or should be revised.

The Board stated the review should encompass an examination that generates recommendations for improving the management of the portfolio, including strategies to manage the volatility of the portfolio, given that the volatility in the value of the investment portfolio is one of the major risks faced by the Corporation.

As stated above, MPI engaged AON to complete the ALM Study in 2014, and filed the study at last year's 2016 GRA. MPI did not put forward a witness from AON last year to speak to its report.

In Order 128/15 the Board stated:

> *The Board notes that volatility in the value of the investment portfolio is one of the major risks faced by the Corporation and that pursuant to its current approach, the Corporation, and in particular Basic, are not fully immunized from interest rate risk. The Board recognizes that significant improvements have been implemented by the Corporation relative to the approach that it utilized in years past, but in the view of the Board, the interest rate risk remains at a level that requires further review and analysis.*

The Board directed MPI to bring an expert witness to the 2017 GRA hearing to testify with respect to its current asset mix, duration matching strategy and strategy to manage Basic interest rate risk. This expert was to provide a report regarding those issues, which would be filed with the 2017 GRA.

In addition, the Board sought an update on the status of the use of corporate bonds in the bond portfolio, including insight on the performance of those bonds. In response, the Corporation indicated that it had not implemented the recommendation, previously made by AON to add a specific allocation to corporate bonds, as the Corporation was of the view that non-marketable (MUSH) bonds were a reasonable substitute for corporate bonds.

MPI advised that it had engaged AON to study the issue further and, in the Application, provided a report from AON on the issue. The AON study noted that as a Crown Corporation, MPI has a commitment to invest in Manitoba, which it fulfills by investing in MUSH bonds. AON commented on the benefits MUSH bonds bring to a fixed income portfolio: having comparable yields across the front half of the yield curve, where the majority of corporate bonds are issued; attractive long-term returns, effective high credit quality, and an absence of historical defaults. The disadvantages of MUSH bonds were noted by AON as: a lack of liquidity, a lack of sector and/or credit diversification, a lack of market price discovery, and a lack of options as to terms and features. AON concluded that, assuming that MPI's objective is to employ a duration matching strategy, if the Corporation's desired portfolio return and duration is achievable with a combination of federal, provincial and MUSH bonds, replacement of the existing bonds with corporate bonds would not be necessary. AON did state, however, that it maintains its recommendations from the 2014 ALM study, and would still recommend that the Government of Manitoba and MPI agree upon an acceptable range for corporate bonds, to facilitate tactical allocations within the overall duration matching strategy.

Julianna Spiropoulos of AON appeared at the hearing to provide evidence in respect of the 2014 ALM Study, for which she was responsible. Ms. Spiropoulos holds a Bachelor of Science degree in Actuarial Science, a Masters in Business Administration, and is a Chartered Financial Analyst. Ms. Spiropoulos stated that AON used MPI-selected metrics based on the ten-year average Basic net income to measure “reward” and ten year average standard deviation of Basic RSR to measure “risk”. She noted that MPI’s primary concern is to address short-term volatility of the premium rate requirement.

In terms of the asset mix, Ms. Spiropoulos stated that MPI’s risk tolerance was low given MPI's mandate to break even rather than targeting for profit. As well, there is an extensive process to change the targeted levels of reserve and MPI does not have direct control over the premium rates. Therefore, AON had recommended that MPI adopt a specific portfolio at the lower end of the risk spectrum with a significant allocation to real estate and infrastructure. This would provide some inflation protection over the long-term, and a balance of more liquid equity allocation. Proceeding in this manner would ensure that growth portfolio was not entirely in illiquid assets and that it had some diversification into more liquid asset classes.

As observed by AON, duration matching of investments and claims liabilities would not mean that net income is fully immunized against interest rate changes, as only average durations are being matched, not the cash flows underlying those durations. Also, over 35% of the fixed income portfolio supporting the interest rate sensitive claim liabilities was invested in non-marketable (i.e. MUSH) bonds, which are not interest rate sensitive and do not fluctuate with changes in interest rates. This large investment in non-marketable bonds would make it difficult for MPI to fully protect at the Basic level its net income exposure to changes in interest rates.

MPI implemented the ALM duration matching at the Corporate level, as it provides a better risk versus return profile. The Corporation indicated that undertaking the matching at the Basic level would increase the indicated rate increase in this Application from the initially proposed 2% to 3.7%.

The Corporation stated that fully matching the duration of the fixed income portfolio and claims liabilities does not completely eliminate all interest rate risk to the Corporation, nor would it eliminate what it considered to be the need for an IRFRF. In the Application, the Corporation stated that the net interest rate impact was $16.0 million on average over the rating years, compared to $18.1 million using last year's assumptions, a $2.1 million difference.

Mr. Valter Viola was called as an expert witness in the hearing, on behalf of CAC. Mr. Viola is a Chartered Financial Analyst and holds a Masters in Business Administration and a Bachelor of Commerce degree. He provides consulting services to institutional investors, Boards, Investment Committees and Management Teams on investment strategies and investment risk management. The focus of Mr. Viola's evidence, and his report filed as an exhibit in the GRA, was to discuss investment portfolio management and the risk/reward framework, and to provide several recommendations related to MPI's investment portfolio design. Mr. Viola was qualified to give evidence in the hearing as an expert in (1) investment portfolio management; (2) investment portfolio research, economics and risk management; and (3) quantitative asset liability modelling.

Mr. Viola questioned the reliance on accounting metrics based on net income, which metrics were used by AON for the asset portfolio design for MPI. Those metrics would not capture changes in the market value of material assets such as equities or MUSH bonds, or changes in the value of pension liabilities. Mr. Viola recommended that MPI make elections that minimize the discrepancy between net income and comprehensive income for asset/liability modelling purposes, even if only on a notional basis.

Mr. Viola also recommended that MPI redefine return risk, to inform its long-term asset mix decisions based on valuations that reflect market values rather than accounting values, which may be materially different. Regardless of the accounting convention, for portfolio management and asset mix decision making, according to Mr. Viola, there needs to be an adjustment to assets and liabilities to the extent that the accounting is not market-value based.

Mr. Viola also questioned the high concentration of Canadian equities in the Corporation's portfolio. Mr. Viola indicated that international diversification was important to Canadian investors given the concentrated nature the Canadian Market with three (of ten) sectors in Canada where Financial Services, Energy and Materials represent a very large portion of the Canadian market. He noted that MPI had no investments in international equities, a large part of the global market. He further stated that there is a potential for missed opportunities to add value, have higher returns, and to diversify the portfolio. Mr. Viola stated his belief that through its focus on short-term rate stability, MPI is losing the opportunity for long-term lower premium rate levels.

4.5. Investment Income Forecasting

At the 2014 GRA, the Corporation proposed a new methodology to forecast its investment income. This methodology measured the impact of interest rate changes on investment income and claims liabilities, whereas the methodology employed by the Corporation previously did not do so. MPI now models changes in the fair market value of its marketable bonds and the changes to bond values flow through Basic's net income because those assets are categorized as Fair Value Through Profit and Loss. Basic's operating results are very sensitive to interest rate changes, including the timing and the amount of the interest rate changes. Because it is difficult to predict the amount and timing of assumed interest rate changes, Basic net income is very difficult to forecast accurately.

The Corporation acknowledged that it does not have expertise in interest rate forecasting but stated that it has an in-depth understanding of the interest rate risks which it faces. The Corporation acknowledges that the GRA must be prepared on a best estimate basis.

In Order 128/15, the Board directed the Corporation to file the Application on the basis of the interest rate methodology that it uses currently, as well as on the basis of an Olympic style average (i.e., excluding each of the highest and lowest values of the non-long term standard interest rate forecasts utilized), and utilizing at least one additional longer term forecast.

In this GRA, MPI stated that in its view, its Standard Interest Rate Forecast (SIRF), which is based on an average of the forecasts for the 10-year Government of Canada interest rate from the five major banks and Global Insight, is not a best estimate forecast. Based on the experience of the last several years, the forecasted changes in interest rates determined by the SIRF have been materially different from actual interest rate changes since 2008.

The Corporation stated that it uses only one long-term forecast because other long-term forecasts do not provide timely or monthly forecast changes, or cannot be disclosed publicly. It also filed additional forecast information including the long term forecasts from the five major banks which are not generally readily available for public disclosure. In response to the Board's information requests and undertakings, MPI filed an updated long-term interest rate forecast, incorporating additional confidential Bank long term forecast forecasts from the five major banks and excluding Global Insight. MPI also adjusted the forecast, eliminating the high forecast in each forecast quarter for the determination of the average.

MPI has indicated that based on the current SIRF, net income will be impacted positively in 2017/18 and 2018/19 by about $32 million. If the interest rates do not increase as forecast, there will be a shortfall. This loss alone, without accounting for any other cost pressures, would require a 5% rate increase. In light of this risk, the Corporation requested the IRFRF be incorporated in the Application.

MPI led a Technical Conference on Interest Rate Forecasting in August of 2016. The report prepared by its expert witness, Dr. Sean Cleary, was filed in this GRA. Dr. Cleary is the BMO Professor of Finance at the Smith School of Business at Queen's University and holds a Ph.D. in Finance from the University of Toronto. Dr. Cleary is also a Chartered Financial Analyst. Dr. Cleary was called as a witness for MPI to present the results of his research on interest rate forecasting issues. Dr. Cleary was qualified as an expert in finance and capital markets, specifically with respect to the predictive power of different interest rate forecasting approaches, and risks to the forecasting of interest rates.

Dr. Cleary's evidence was that, based on the historical 10-Year Government of Canada bond data, the Naïve forecast approach (based on assuming no future change in interest rates) was better than the SIRF. Based on his historical analysis, the weighted average percentage forecasting error was -39.5% for Naïve versus -92.9% forecasting error for the SIRF.

Dr. Cleary recommended employing a “50-50” interest rate forecast, representing the midpoint between the SIRF and the Naïve forecasts. The use of such a forecast, according to Dr. Cleary, would minimize forecasting error as the 50-50 interest rate forecast in the long run would reflect the fact that interest rates may increase soon, but it may not happen as quickly as anticipated. In Dr. Cleary's opinion, it would also help to adjust for the errors in timing of changes in interest rates.

MPI filed an updated interest rate forecast as of August 2016 based on Dr. Cleary's recommended, and MPI's proposed 50-50 interest rate forecast. It indicated that interest rates would decrease from 1.19% at the end of 2015/16 to 1.11% at the end of 2016/17, a decrease of eight basis points during the year. This compared to the original March forecast increase of 57 basis points based on the SIRF.

Based upon this updated forecast, MPI advised that Basic's forecasted net loss in 2016/17 would increase by $21 million, from an originally forecast net loss of $13.4 million to a net loss of $34.4 million. The forecast also indicated a net loss of $10.8 million for 2017/18 and a net income of $24.1 million for 2018/19. Break-even rates based on the 50-50 interest rate forecast method raised the requested rate increase from 2% to 4.3%; the additional 2.3 percentage points attributable to the IRFRF.

The forecasted change in interest rates based on the Application, an updated August forecast, an expanded base forecast and MPI's 50-50 interest rate forecast proposal were as follows:

Government of Canada 10-Year Interest Rate Forecast

Fiscal Year	Application Standard Forecast	August Update Standard Forecast	August Expanded Standard Forecast	August Revised Application 50-50 Interest Rate Forecast
2015/16A	1.19%	1.19%	1.19%	1.19%
2016/17	1.76%	1.20%	1.17%	1.11%
2017/18	2.43%	1.72%	1.62%	1.37%
2018/19	3.30%	2.77%	2.39%	1.90%
Basis Point Change (2019-2016)	211 BPS	158 BPS	120 BPS	71 BPS

MPI submitted that the SIRF presented in the Application, reflected in the first column of the above table, was predicting a significant interest rate increase during the next three years. Relative to historical interest rate movements over three years, the forecast represents a 1-in-29 year interest rate movement. Even with a best estimate, interest rate forecasting risk remains. Interest rates have declined in recent months, they could remain flat through the forecast period, or as the markets currently predict, rise less aggressively than the 50-50 interest rate forecast predicts. Risk remains with any forecast, but MPI's position was that the 50-50 interest rate forecast reduces this risk on a forward looking basis.

As stated above, the Corporation requested the IRFRF be incorporated in the Application, and re-filed a 4.3% Basic rate change based on an August 50-50 interest rate forecast. The net interest rate impact is reduced from $16.0 million based on the originally filed Application to $10.2 million on average over the rating years.

CAC called as witnesses in the hearing, Dr. Wayne Simpson and Ms. Andrea Sherry. The focus of their evidence was on the proposed IRFRF, as well as on the DCAT.

Dr. Simpson is a Professor of Economics at the University of Manitoba, and was qualified as an expert in applied econometrics and applied microeconomics. Ms. Sherry was qualified as an expert in actuarial matters, and specifically: (1) in valuation, including the calculation of policy liabilities, forecast premiums, and claims amounts based upon trends; and (2) in solvency and economic capital, including oversight of capital stress testing and economic capital calculations; and actuarial pricing and product development.

On the issue of the IRFRF, Dr. Simpson was of the view that the arguments made by MPI in support of the IRFRF mirror those made in support of the DCAT, and repeat those used to justify holding retained earnings in the RSR, which is determined by the DCAT. Dr. Simpson commented that it is noteworthy that no other insurance company or jurisdiction in Canada or North America uses a concept such as the suggested IRFRF. Dr. Simpson expressed concern with the use of the IRFRF as a result, taking into account what he referred to as the extensive collaborative efforts made by MPI to develop its version of the DCAT methodology. He also identified what he viewed as concerns with the methodology employed by Dr. Cleary in his report that recommended the 50-50 interest rate forecast method.

In Dr. Simpson's opinion, the risks associated with a forecast overstating the growth of interest rates between 2017/18 and 2020/21 is already addressed in the DCAT Report, which identifies the three most important risk factors facing the corporation, one of which is the interest rate decline scenario. And, because the scenario considers sustained low interest rates relative to a base forecast of interest rates rising according to a consensus bank forecast, this is exactly the same risk scenario cited for the IRFRF. The interest rate decline scenario is also an important component of the combined scenario which is ultimately used to justify an RSR minimum target level for total equity. Further, Dr. Simpson commented that the methodologies used to calculate the IRFRF and the DCAT interest rate decline scenario involve exactly the same elements.

In his view, prediction of interest rates carries inherent risk. As there is no precedent for an IRFRF rate adjustment elsewhere, and, given that MPI already employs a methodology which takes into account interest rate risk, Dr. Simpson's view was that MPI's proposal for an IRFRF should be abandoned.

4.6. Interveners' Positions

CAC

CAC suggested that Mr. Viola's recommendations regarding the Corporation's investment portfolio be given a significant amount of weight. The AON ALM study, according to CAC, has limited utility in allowing the Corporation to make portfolio decisions, given the return/risk metrics and excessive constraints, and remarked that Mr. Viola's evidence was that he viewed the ALM study as understating the risks of the Corporation, being market risks. CAC stated that the weight assigned to Canadian equities in the Corporation's portfolio is not consistent with evidence of the historic advice of experts. CAC asked the Board to find there is reason to be concerned the Corporation's portfolio is not adequately protected against interest rate risk. Furthermore, an emphasis by MPI on short-term rate stability leads to an excessive level of risk for the investment returns gained. CAC followed Mr. Viola's evidence, that one should look to the use of Real Return Bonds as a starting point for a benchmark portfolio with minimum risk. CAC noted that one of the factors of a major loss in the Corporation's investment portfolio was a $28.5 million write-down in Canadian equities. Accordingly, CAC argued that MPI is putting itself at risk by being too heavily weighted in favour of Canadian equities.

With all of that in mind, CAC argued that a new ALM study is required. CAC expressed concern that undue risk is being placed on Manitoba consumers as a result of investment portfolio selections. The ALM study conducted by AON in 2014 was based on accounting metrics which were driven by concern with short-term volatility, and Accumulated Other Comprehensive Income (AOCI) was excluded from the metrics. As a result, as stated by Mr. Viola, MPI's portfolio design is being driven by inappropriate selection of risk and return metrics, understating the risk, and unduly constraining the portfolio outcomes.

On the issue of interest rate forecasting, CAC stated that interest rate forecasting has been challenging since the financial crisis of 2008. CAC argued that the Naïve forecast should not be adopted as a sustainable best estimate, and that it could not find a precedent for the 50-50 forecast proposed by the Corporation. CAC stated that the evidence in the hearing did not favour reliance on the 50-50 forecast, and that the SIRF should be adopted. CAC argued that the Corporation had not met its onus to establish that the 50-50 interest rate forecast is the best estimate.

CAC argued that the evidence of Dr. Cleary, in support of the 50-50 interest rate forecast, should be given limited weight given the absence of statistical tests and the lack of any robust foundation for his conclusions. By contrast, CAC argued that its expert witness, Dr. Wayne Simpson (although not retained by CAC to provide comment on the predictive accuracy of the interest rate forecast) offered evidence-based recommendations in that regard. CAC characterized the Technical Conference on interest rate forecasting which took place in August of 2016 as not reflective of true collaboration. CAC recommended a further Technical Conference on the issue of interest rate forecasting, including MPI and Manitoba Hydro to set a precedent for both of these Crown Corporations and their customers, involving a literature review and a review of regulatory practice in other jurisdictions.

CMMG

CMMG expressed the view that the IRFRF is not necessary, and that the DCAT adequately addresses interest rate risk. CMMG questioned whether the Corporation was adequately matching investments to claims liabilities, and suggested that a more diversified portfolio would assist in that regard. CMMG characterized the IRFRF as a creative way for MPI to collect more funds from ratepayers to allow a wider margin for the Corporation to make errors in its forecasting.

CAA

CAA was supportive of CAC's position, that MPI should investigate and adopt a conservative, properly balanced, and diversified portfolio with the aim of reducing the risk of financial shortfalls.

4.7. Board Findings

The Board remains concerned with the Corporation's continued exposure to interest rate risk. The Corporation’s reliance on interest rate forecasting to make accurate financial forecasts is challenging, it requires not only the quantum, but also the timing of interest rate changes. This makes it very difficult for MPI to provide a reasonable forecast of net income for rate-setting purposes. Although the Corporation has, through its AON-recommended ALM strategy, provided the Corporation an investment portfolio mix that provides substantial protection from changes in interest rates, the risk to Basic and its ratepayers remains material.

The Board notes that MPI maintains a material portion of its fixed income securities used to meet its claims liabilities in non-interest-sensitive MUSH bonds. In fact, its holdings in MUSH bonds are set at the maximum proportion allowable under its Investment Policy Statement. This hampers MPI's ability to protect the Corporation's Basic net income from changes in interest rates. This pool of capital being provided to Manitoba entities has an indirect and material impact on Basic net income. The Board also understands that, given the manner in which the Corporation's investment portfolio is managed, that MPI is limited in the extent to which it can direct the composition of its investment portfolio. However, the Board is finds that further study of the Corporation's portfolio is warranted, with a view to informing the Corporation and the ICWG as to the optimal investment portfolio that might be recommended for approval by the Department of Finance. The current Investment Policy Statement filed in the Application excludes International equities as a permitted investment class.

The Board finds that an ALM study should take place more frequently than has been the practice with the Corporation. The Board finds there is a need to update the ALM study, given that now the RSR target is based on total equity. The ALM study filed in the 2016 GRA used a constraint based on retained earnings that excluded AOCI, a significant component of total equity. The Board directs that MPI obtain an updated ALM study to be filed in the 2018 GRA, which study shall address each of the 18 recommendations made by Mr. Viola, which are set out in Appendix E of this Order.

With respect to interest rate forecasting, the Board has considered the evidence of Dr. Cleary along with the evidence filed in this Application as to interest rate forecasting generally. While the Board recognizes that Dr. Cleary has expertise, it is not satisfied on the basis of the report filed and the testimony in this hearing that MPI has met its onus to establish the 50-50 interest rate forecast as a best estimate. The Board therefore does not approve the use of the 50-50 interest rate forecast for rate-setting purposes. Although the proposed approach might, from time to time, temper the forecasted bank interest rate increases, it represents neither a generally accepted nor a widely used interest rate forecasting methodology.

The Board recognizes that bank forecasts have struggled with accuracy in the last several years, due to global economic circumstances which have seen interest rates at historically low levels. Dr. Cleary has observed that over the last eight years, the standard interest rate forecasts based on Bank forecasts have exceeded actual 10-year Canada bond yields by a wide margin – 1.7% on average, representing a forecasting error percentage of -93% of the actual yields. The Naïve forecast was the closest to accurate over the past eight years, but no expert recommended its use. The Board did not find any of the experts provided compelling evidence of the best estimate in interest rate forecasting. The evidence before the Board to date has not provided clarity to it on the issue of interest rate forecasting.

The Board finds that the Technical Conference on interest rate forecasting which took place in August of 2016 did not represent optimal conditions for true collaboration. As a result, and rather than employing any of the proposed interest rate forecast methodologies, the Board directs that MPI participate in a further Technical Conference on interest rate forecasting. The Board anticipates that this Technical Conference will allow for further opportunity to critically examine current interest rate forecasting methodology, and to allow for further, more rigorous collaboration. This should result in a reasonable opportunity for exchange of written materials and/or expert reports prior to the conference taking place. The Technical Conference will be organized by the Board with the input of intervenors and MPI. The Technical Conference shall take place on a date mutually agreed upon as between the Board and MPI, which date shall be sufficiently early such that the information shared in the Technical Conference will be included in the 2018 GRA.

MPI reported a net investment loss in Basic of $4.0 million in 2015/16. The net investment loss incurred by MPI in 2015/16 was impacted by a $33.4 million investment impairment write-off in Canadian equities, much of which were related to energy resource investments. The Board finds that the Canadian economy is highly concentrated in a limited number of sectors including Financial, Energy and Material natural resources, which increases the risk of underperformance for the MPI portfolio by overweighting in Canadian equity investments.

MPI's investment portfolio, with an overall return in 2015 of 2.5%, is not performing favourably when compared to the other Manitoba entities reviewed (CSSB, WCB and TRAF), which had an average return of 7.9%. While MPI has attributed 2.5 percentage points of this difference to portfolio design, the Board notes that 3 percentage points of it relate to comparative returns, which represent in MPI’s calculations approximately $12.1 million in lower investment income which is a material amount.

The Board wishes to point out that had the performance of the Corporation's investment portfolio more closely matched that of its peers, a rate increase might not have been necessary. Further, while the Corporation has argued that CSSB and TRAF have much longer investment time horizons due to their long duration liabilities, the Board notes that SGI had a portfolio which includes a public equity mix where almost ¼ is in International equities, while MPI has limited its equity investments to Canadian and US equities. The Board considers these lower comparative returns to be attributable to the current investment asset mix employed by the Corporation, which includes a large proportion in Canadian equities with no exposure to International equities, outside the U.S.

5. RATE STABILIZATION RESERVE AND TARGET CAPITAL RANGE

5.1. Purpose of the RSR

Prior to the current Application, the Corporation's adopted wording for the stated purpose of the RSR read as follows:

> *To protect motorists from rate increases made necessary by unexpected events and losses arising from non-recurring events or factors.*

In Order 128/15, the Board directed that in the Application, MPI file a proposed, revised definition of the RSR. In response, the Corporation has proposed an amended wording of the stated purpose of the RSR to read as follows:

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

5.2. Basic RSR and Total Equity Balances

The Corporation reported that the Basic RSR balance as at February 29, 2016 was $194.5 million, after a net loss from operations of $56.1 million and a transfer from non-Basic retained earnings of $72.7 million as reported for fiscal 2015/16. This transfer from non-Basic retained earnings followed on a similar transfer in fiscal 2014/15 of $75.5 million. Including AOCI of $36.5 million, Basic total equity was reported at $231.0 million as at February 29 2016, matching the minimum total equity target proposed by the Corporation and approved by the Board from the prior Application. AOCI represents an aggregation of the difference between net income and total comprehensive income, and includes unrealized gains or losses on assets categorized as available for sale.

A summary of the recent actual and expected future, composition of Basic total equity is provided below, based on the Corporation's proposed 4.3% rate level increase and the updated August 2016 50-50 Interest Rate Forecast.

August 2016 50-50 Interest Rate Forecast (C$ millions):

	Actual		**Forecast**	**Projected**	**Outlook**
Years Ending 28/29 February	**2015**	**2016**	**2017**	**2018**	**2019**
Basic RSR Opening Balance	100	178	194	160	149
Basic Net Income (Loss)	2	(56)	(34)	(11)	24
Basic RSR Before Transfers	102	122	160	149	173
Transfer in from Non-Basic Retained Earnings	76	73	0	0	0
Basic RSR	**178**	**194**	**160**	**149**	**173**
Basic AOCI	35	37	36	45	40
Basic Total Equity	**213**	**231**	**196**	**194**	**213**

As in the past, the Board also looks to the overall financial strength of the Corporation in establishing rates. On an overall basis, as at February 29, 2016 the Corporation reported retained earnings of $346.7 million (including $152.2 million in Extension and SRE) and total equity of $390.0 million (including $159.0 million in Extension and SRE).

5.3. Basic RSR / Total Equity Target History

Considerable evidence has been led over the years with respect to Basic target capital levels, at times leading to the Corporation and the Board having differing perspectives in this regard.

In Order 161/09, the Board reset the Basic RSR target range to span $77 million up to $154 million based on the Kopstein approach (the 1989 Report of the Autopac Review Commission) which set the range based on 10% to 20% of net written (vehicle and driver) premiums, on the basis that this methodology would be clearly understood by all stakeholders. With time, it became apparent this approach was not responsive to changes in the risk profile of the Corporation's Basic insurance operations.

In Order 135/14, the Board indicated its preference for setting Basic target capital levels based on scenario testing adapted from the annual Basic Dynamic Capital Adequacy Testing (DCAT) investigation. In Order 58/15, the Board directed that Basic target capital levels will be set in terms of Basic total equity, including AOCI, rather than being set in terms of Basic RSR. In

Order 128/15, the Board directed that for fiscal 2015/16, the lower threshold for the Basic target capital range be set based on the 1-in-40-year Combined scenario. This would include routine management and regulatory actions over a 2-year time horizon (calculated at $231 million by the Corporation). On a notional basis, the upper threshold for the Basic target capital range would be set based on the use of a 100% Minimum Capital Test (MCT) ratio (calculated at $366 million by the Corporation). This latter directive pending further study of scenario testing in support of setting the upper threshold for the Basic target capital range.

5.4. Lower Threshold for the Basic Target Capital Range

The approach put forward by the Corporation to quantify the lower threshold for the Basic target capital range continues the general approach approved for fiscal 2015/16 in Order 128/15. This was updated to be based on the 2016 Basic DCAT investigation and target capital analysis. This initially indicated a lower threshold of $181 million of Basic total equity, which evolved through the hearing process to become $159 million as ultimately proposed by the Corporation. This latter amount is again based on the 1-in-40-year Combined scenario and includes routine management and regulatory actions over a 2-year time horizon. It is updated to reflect the Corporation's proposed 4.3% rate level increase and the August 2016 50-50 interest rate forecast. In effect, the proposed lower threshold is the minimum amount of Basic total equity necessary as at February 28, 2017 (essentially the start of the proposed rating year for this Application). It is estimated to avoid fully exhausting Basic total equity at any time over a two-year time horizon following the occurrence of a 1-in-40-year (97.5th percentile) plausible adverse event.

The collaborative process anticipated by Order 128/15 continued through the period leading up to submission of the current Application and through the ensuing two rounds of information requests and hearing undertakings. In broad terms, the target capital analysis in support of the lower threshold, as envisaged by the Board through the collaborative process, was substantially achieved in the analysis summarized in MPI Exhibit #77. This exhibit indicates a lower threshold for the Basic target capital range of $161 million of Basic total equity (close to the $159 million being proposed). It is based on the most significant 97.5th percentile plausible adverse scenario tested over a two-year time horizon.

In its closing argument, the Corporation advised caution against the setting of a lower threshold anywhere below the level being proposed. It noted that further transfers in from non-Basic retained earnings are not foreseeable in the near term and that the collaborative process has led to the use of aggressive assumptions in the DCAT and target capital analysis.

5.5. Upper Threshold for the Basic Target Capital Range

The Corporation based its proposal for the upper threshold of the Basic target capital range on the amount of Basic total equity required to produce an MCT ratio of 100% in the DCAT base scenario as at February 28, 2017, based on the Corporation's forecast of Basic insurance operations. This initially indicated an upper threshold of $404 million of Basic total equity, which evolved through the hearing process to become $411 million as ultimately proposed by the Corporation.

The MCT used for this purpose is that promulgated by the Office of the Superintendent of Financial Institutions Canada (OSFI) which took effect January 1, 2015. In support of its proposal to use the MCT and a threshold MCT ratio of 100%, the Corporation noted the MCT is a standardized risk-based test used in the property-casualty insurance industry across Canada, including Saskatchewan and British Columbia. The 100% threshold being proposed for the setting of the Basic upper threshold is used as a minimum threshold by OSFI in the private sector (below which regulatory intervention would be expected), is used as a target level by Saskatchewan Auto Fund, and is used as a lower threshold for the Basic program provided by ICBC.

The Corporation's scenario testing revealed that none of the 5,000 simulations run for the Combined scenario with routine management and regulatory actions in support of its target capital analysis were found to fully exhaust Basic total equity over a two-year time horizon.

Dr. Simpson and Ms. Sherry co-authored a report on the DCAT and the RSR target range, and provided testimony in that regard at the hearings. In Dr. Simpson's view, the 1-in-40 risk tolerance set for the lower bound of the RSR, should be considered as a target, or midpoint, rather than a minimum amount. He noted that an MCT of 100% is associated with a risk tolerance vastly in excess of 1-in-200, based on the Corporation's own scenario testing.

Dr. Simpson and Ms. Sherry expressed the opinion that an MCT of 100% is not an appropriate test for setting the upper target of the RSR: 100% MCT does not arise from the use of a specific DCAT adverse scenario and probability level.

5.6. Interveners' Positions

CAC

CAC took the position that the RSR is not aimed at addressing the solvency of the Corporation; rather, its purpose is to mitigate against rate shock. As a result, the use of the MCT, which is a solvency test, is not appropriate in setting the upper bound of the RSR target range. CAC's position, relying on the evidence of its experts, was that the RSR should be tied to risk, based on the analytical foundation employed by the DCAT methodology. CAC pointed to evidence from Dr. Simpson, that the MCT has no direct link to any specified risk scenario at any specified tolerance range. An RSR that is too large may raise issues of inter-generational inequity. If the upper limit for the RSR were to be set using 100% MCT, it would provide protection against exhausting Basic Total Equity beyond a 1-in-200 year event, and perhaps above a 1-in-5000 year event.

CAC asserted that MPI should employ a test that is responsive to the risk faced by it, which is the DCAT. CAC took the position the RSR range should be set based on the DCAT plausible adverse scenarios, to be internally consistent with DCAT methodology, with the range perhaps being established with reference around a 1-in-40 year target, or midpoint. If the Board were to adopt the SIRF as the best estimate, the DCAT-established RSR range would cover off interest rate risk, as it was intended to do.

CMMG

CMMG was supportive of an RSR range that would see the minimum amount set by the DCAT serve not as the minimum, but as the upper bound of the range. In CMMG's view, the RSR has not been used frequently since its inception and on occasion has been used for purposes outside those for which it was intended. CMMG stated that the amount of the upper limit for the RSR, as requested by MPI, on the basis of 100% MCT, should be viewed critically.

5.7. Board Findings

The Board finds that the Corporation's amended wording for the stated purpose of the RSR more accurately reflects how RSR balances are affected in practice.

The Board continues to favour the use of scenario testing adapted from the annual Basic DCAT investigation for purposes of setting Basic target capital levels, expressed in terms of Basic total equity. This approach is consistent with the objective of setting Basic target capital levels to be specific to the risk profile of the Corporation's Basic insurance operations.

The Board continues to support the use of the most significant 97.5th percentile plausible adverse scenario with routine management and regulatory actions over a two-year time horizon for the purposes of setting the lower threshold of the Basic target capital range. From the 2016 Basic DCAT investigation and target capital analysis, the Corporation selected the Combined scenario for this purpose, and proposed $159 million of Basic total equity as the lower threshold, which the Board is prepared to approve. This after consideration of how close this is positioned relative to the $161 million lower threshold indicated by the Board's preferred approach as is substantially reflected in MPI Exhibit #77.

The Board is concerned with the potential implications of the Corporation's view that the Basic DCAT investigation and target capital analysis are using "aggressive assumptions". It is the Board's expectation, and for that matter a requirement of accepted actuarial practice in Canada, that the Corporation's Basic Application, including the rate indications, the Basic DCAT investigation and the target capital analysis, be prepared on a best estimate basis. Doing otherwise complicates the regulatory review process.

For purposes of setting the upper threshold of the Basic target capital range, the Board withdraws its support of the use of the MCT and a threshold MCT ratio of 100%. The Board is concerned that the degree of conservatism implied by the Corporation's proposal may be excessive based on the Corporation's scenario testing at the more extreme percentile levels of possible outcomes, potentially giving rise to a risk of moral hazard. The Board sees the objectivity of the MCT as both a plus and a minus. The test's objectivity is a plus because it is a standardized metric, facilitating comparison over time for a given entity, and comparison between entities at a given point in time. It is because of these positive attributes that the Board directs the Corporation to continue to include MCT calculations for all scenarios in its DCAT investigation and target capital analysis. The test's objectivity is a minus because it is designed for private sector property-casualty insurance entities. While they share many similarities with the Corporation's Basic insurance operations, they also have many important differences, which have a bearing on the Corporation's Basic risk profile. The Board is also concerned about setting an upper threshold based on a 100% MCT ratio when the test itself is often subject to change by OSFI. This typically changes what any given entity needs in capital at a given point in time in order to achieve a given MCT ratio.

With respect to the setting of the upper threshold of the Basic target capital range, the Board believes the question that still needs to be answered is this: *beyond what percentile level is it no longer reasonable and appropriate for the Corporation to hold funds against possible adverse circumstances, instead of rebating these excess funds back to the ratepayers.* The Board recognizes that the Corporation's focus to date on using the MCT for upper threshold purposes may have limited its efforts on scenario testing at the more extreme percentile levels of possible outcomes. To this end, the Board directs that the next Application will include the appropriate scenarios in support of the proposed upper threshold for the Basic target capital range. This includes the iterative approach favoured by the Board as substantially reflected in MPI Exhibit #77, and also includes testing of at least 99th and 99.5th percentile outcomes.

In addition, the Board appreciates the Corporation's view that the upper threshold should be set based on consideration of the likelihood of triggering an RSR Rebuilding Fee, rather than the likelihood of exhausting Basic total equity. The Board believes both perspectives are relevant, and directs the Corporation to reflect consideration of both in the next Application.

The Board favours the continuation of the collaborative process between Applications as a means of more promptly advancing the evolution of this process, and so encourages the Corporation to avail itself of input and feedback from stakeholders. The Board therefore orders that the collaborative process on the use of the DCAT for setting of Basic target capital levels be continued, and that the process include a Technical Conference in that regard. The Technical Conference shall take place on a date mutually agreed upon as between the Board and MPI, which date shall be sufficiently early such that the information shared in the Technical Conference will be included in the 2018 GRA. The Technical Conference on the use of the DCAT for setting of Basic target capital levels shall be held together with the Technical

Conference on Basic Ratemaking in Accordance with Accepted Actuarial Practice in Canada referred to in Section 6.5 below.

In effect, the Board is not approving any upper threshold for the Basic target capital range for 2017/18. The Board recognizes that this position is not sustainable over the longer term, but in the near term, based on current forecasts, the likelihood of a breach of any reasonable upper threshold appears to be quite remote.

The Board continues to hold the view that the Extension line of business should be regulated, given the Corporation's market position as a near monopoly provider of non-compulsory auto insurance in Manitoba. The Board recommends to Government, therefore, that its jurisdiction be extended to include the Extension line of business, including rates and target capital levels, as well as the SRE target capital levels.

6. RATE DESIGN

6.1. Major Classification, Insurance Use and Territory

The Application reflects an actuarial methodology for forecasting required rate levels which is substantially unchanged from that used in last year's Application.

The Corporation utilizes a financial forecast method as the basis for proposed rate level adjustments, both overall and for each of the six Major Classifications. The Corporation develops indicated adjustments by insurance use categories and territories within the Major Classifications based on a relativity analysis of its classification experience. To avoid rate shock, the Corporation continues to cap the resulting experience adjustments as follows:

- If the indicated experience adjustment is 10% or less in magnitude, the rate is adjusted by the indicated amount; and

- if the indicated experience adjustment is greater than 10% in magnitude, the rate is adjusted by 10% plus one third of the difference between the indicated adjustment and 10%, up to a maximum of 15%.

The Corporation did introduce an important one-time change to the derivation of the required rate level for the Motorcycle Major Classification, using nine years of experience instead of the usual ten years. This change was introduced to mitigate the impact of the significantly poor Motorcycle loss experience in the tenth oldest year. If included in this Application, it would trigger a larger rate increase than currently proposed, which would likely be substantially reversed in the next Application when that year will drop out of the ten-year experience window.

6.2. Vehicle Classification System

The Corporation continues to classify vehicle risk by considering insurance use, rating territories, and rate groups. Insurance use classifications categorize vehicles by the nature of the vehicle and its intended insurance use. There have been no changes in insurance use classifications in this Application.

Vehicles are assigned to one of five territories in Manitoba, including a commuter territory in the areas adjacent to the City of Winnipeg, based on the primary residence of the registered vehicle owner. There have been no changes to the rating territories in this Application.

For passenger vehicles and light trucks, the Corporation uses the Canadian Loss Experience Automobile Rating system (CLEAR) promulgated by the Insurance Bureau of Canada (IBC), which amalgamates data from Canadian insurers and creates rate groups (up to 99) by vehicle make, model and model year, for each of collision, comprehensive and accident benefits coverages. The Corporation combines those rate groups to produce a smaller number of rate groups for the single Basic coverage package. Then it adjusts for its own experience by rate group, thereby re-calibrating the CLEAR indications.

6.3. Accepted Actuarial Practice in Canada

Ratemaking in accordance with accepted actuarial practice in Canada involves determining the indicated rate level such that, for a given future rating year, the present value of expected future revenue cash flows (e.g., premiums and fees) is equal to the present value of expected future expense cash flows (e.g., claims, adjusting expenses and non-claims-related costs, including any profit provision).

For several years, the Corporation has based its overall rate adjustment proposal on an objective of achieving a break even average net income over the proposed rating year and the year following. The two-year period used here is consistent with the two-year period over which the premiums at the proposed rate level will be brought into income and fully earned, this due to staggered renewals throughout the rating year.

In 2012, the Canadian Institute of Actuaries established a new Standard of Practice with respect to property-casualty insurance ratemaking. Among other things, this requires an actuary preparing a rate level indication to derive the indication in accordance with accepted actuarial practice in Canada. This supplemental analysis has been provided by the Corporation in recent years. This has been the focus of an ongoing collaborative process with stakeholders in the time leading up to the submission of the current Application and through the ensuing two rounds of information requests and hearing undertakings. In its evidence, the Corporation acknowledges the value coming from this collaborative process and the need for still further collaboration before the Corporation's analysis might be considered to be fully consistent with industry best practices and accepted actuarial practice in Canada. The Corporation also acknowledges that its overall rate adjustment, as proposed, is not fully consistent with accepted actuarial practice in Canada.

Ms. Sherry, a witness for CAC, provided expert opinion on ratemaking in accordance with accepted actuarial practice in Canada. She commented on MPI's ratemaking model, and how it does not follow accepted actuarial practice. She noted that the goal of MPI's ratemaking practice is to break even on a net income basis, over a two-year period. This methodology is at odds with accepted actuarial practice, because investment income is forecast in the pro forma statements and is included in the break-even position goal. In determining actuarially-indicated rates, Ms. Sherry noted, that the financial statements are not relied upon - the purpose of actuarial ratemaking is to project what ultimate losses will be per vehicle, adding in expenses, for the rating year in question. Her evidence was that actuarial ratemaking is prospective: the goal is to accurately predict the losses and expenses of the rating year in question. It is based on the principle that the rate will be an estimate of the expected value of future costs. The actuary will determine the underwriting profit needed to achieve the target total rate of return, after consideration of investment income.

In Ms. Sherry's view, MPI's ratemaking methodology adds unnecessary volatility into the ratemaking process because it includes investment income on a calendar year basis through the pro forma financial statements.

6.4. Interveners' Positions

CAC

CAC took the position that the evidence suggests that the Corporation should adopt ratemaking in accordance with accepted actuarial practice, based on the accident year rather than the fiscal year, as has been MPI's method. CAC argued, in reliance on Ms. Sherry's evidence, that MPI's current ratemaking methodology adds unnecessary volatility by introducing prior year case reserves and incurred but not reported adjustments, and the inclusion of investment income on a calendar year basis. CAC pointed to Ms. Sherry's evidence and noted that the inclusion of investment income on a calendar year basis through pro formas is unnecessary with actuarial ratemaking. CAC argued that a move to actuarial ratemaking would simplify MPI's process, and accurate actuarial ratemaking would lead to a break even position over time.

CAC did note Ms. Sherry's observation that in order to make such a change, some improvements would be required in the Corporation's trend analysis and treatment of reinsurance.

CAC was supportive of implementing an actuarially indicated rate based upon the accident year. This recognized the potential transition issues. It also noted that better cost controls in IT could serve to mitigate any potential rate impacts resulting from the transition to ratemaking on the basis of the accident year.

CMMG

CMMG commented favourably on the Corporation using nine years of data for setting motorcycle rates in this GRA for smoothing purposes, rather than the ten years typically used. CMMG commented that such a change was equitable and sound. CMMG referenced actuarial standards which state that an actuary should examine data related to the recent past and not the distant past, and commented that the use of ten years of data would not be representative of the trend of declining motorcycle claims experience or the current experience.

CMMG argued that five years of claims experience is reasonable for rate-setting purposes for the motorcycle class.

6.5. Board Findings

The Board accepts the one-time change to the derivation of the required rate level for the Motorcycle Major Classification as an appropriate means of avoiding unnecessary rate volatility for this Major Classification.

The Board also finds the advantages of deriving rate level indications in accordance with accepted actuarial practice in Canada to be compelling.

Ratemaking in accordance with accepted actuarial practice in Canada involves meeting the following requirement:

> *The best estimate present value of cash flows relating to the revenue at the <u>indicated</u> rate should equal the best estimate present value of cash flows relating to the corresponding claim costs and expense costs, plus the present value of a*

provision for profit, over a specified period of time. [Canadian Institute of Actuaries Standards of Practice Section 2620.01]

In particular, the Board understands that the means of recognizing investment income in such an analysis is both more straightforward and less sensitive to the results of forecasting interest rates for the purposes of developing forecasted Basic pro-forma income statements. This has been a topic of considerable debate at these hearings in recent years and an acknowledged source of significant risk to Basic insurance operations.

The Board also takes comfort in its understanding that the rate proposals developed by Saskatchewan Auto Fund and the Basic Program of ICBC both rely on rate level indications that meet this requirement.

Accordingly, the Board directs that starting with the next Application, the Corporation's rate proposal, both overall and by Major Classification, will be anchored on rate level indications derived in accordance with accepted actuarial practice in Canada.

In Order 128/15, the Board ordered MPI to work collaboratively with the Board's actuarial advisor and the advisors of interveners (as determined by the interveners) after the issuance of that Order, to enhance the transparency and robustness of the analysis for that purpose. The collaborative process continued after the issuance of Order 128/15, however, further work and collaboration is required in order to refine the Corporation's ratemaking model in accordance with accepted actuarial practice in order to make improvements upon certain aspects of its actuarial methodology.

To this end, the Board also directs that the collaborative process in this regard continue as needed, and include a Technical Conference on Basic Ratemaking in Accordance with Accepted Actuarial Practice in Canada to be led by the Board. The Technical Conference shall take place on a date mutually agreed upon as between the Board and MPI. The date shall be sufficiently early such that the information shared in the Technical Conference will be included in the 2018 GRA. The Technical Conference on Basic Ratemaking in Accordance with Accepted Actuarial Practice in Canada shall be held together with a Technical Conference on the DCAT methodology referred to in Section 5.7 herein.

Although the Board recognizes that the Corporation's analysis of rate level indications in accordance with accepted actuarial practice in Canada is not yet fully developed, the Board nevertheless adopts the Corporation's estimate in this regard of +3.7% overall as the approved overall Basic rate level change to take effect for the rating year commencing March 1, 2017. The Board's Order in this regard follows on its comments in Order 128/15, in which the Board encouraged the continued development of the ratemaking model in accordance with such a practice, as opposed to a GRA rate proposal based upon Basic's income statement result.

The Board has previously commented, and continues to find, that ratemaking in accordance with accepted actuarial practice will serve to simplify the ratemaking process, and reduce the risk associated with the Corporation's need to predict interest rate changes, including the timing and degree of changes, in its current ratemaking practice. The Board is hopeful that rate-setting in accordance with accepted actuarial practice will serve to insulate the Corporation's rate setting process from the risks caused by the need to predict interest rate changes under its current ratemaking model.

The Board notes that the Corporation has not identified any technical concerns with the adoption of ratemaking in accordance with accepted actuarial practice, but has raised a concern that doing so would require it to not break even on a net income basis. In the Board's view, taking into account the Kopstein recommendations, and the statutory framework, MPI is not precluded from employing ratemaking methodology in accordance with accepted actuarial practice. The Board notes that Section 18 of *The Manitoba Public Insurance Corporation Act* requires the Corporation establish and maintain sufficient reserves to meet all of its obligations. The Board is satisfied that a ratemaking methodology which requires the Corporation break even in accordance with accepted actuarial practice, as opposed to breaking even on the basis of net income, is compliant with the requirements of the legislation. In addition, to the extent that the Corporation has considered itself required to break even on a net income basis to meet prior Board orders, the Board notes that it has the authority to vary prior orders and hereby confirms acceptance of ratemaking in accordance with accepted actuarial practice in Canada going forward.

As stated above, pursuant to its rate-setting jurisdiction, the Board looks to the overall financial health of the Corporation. As such, notwithstanding that the Board has endorsed ratemaking in accordance with actuarial practice in Canada, the Board will continue to require that MPI file pro forma financial statements in rate applications to follow.

7. ROAD SAFETY

The Corporation has stated that it continues to share the Board's view that loss prevention, including efforts to improve road safety, are important issues for the Corporation and that successful loss prevention and road safety strategies can minimize economic and social costs to ratepayers.

The Corporation has also stated that its loss prevention efforts seek to identify and implement programs to address primary drivers of claims and claims costs, with the intention of reducing the social and financial impact to ratepayers.

In the Application, MPI forecasted to spend $13.2 million in Basic Road Safety and Loss Prevention programs in 2017/18. The largest component is to be spent on Driver Education including the High School Driver Education program, in the amount of approximately $3.6 million, 27% of the overall budget. Auto-Crime prevention strategies are the second largest expenditure, at $2.6 million, or 20% of the overall budget. Impaired Driving Prevention Strategies are forecast at $2.3 million, or 18% of the overall budget. Other Loss Prevention and Road Safety expenditures include Speed Management Strategies, Occupant Safety Education Strategies, Motorcycle Safety Education, Vulnerable Road User Education Strategies, among others.

In Order 128/15, the Board required the Corporation to advise the Board in this Application of the percentage of its revenue to be allocated to Road Safety and Loss Prevention initiatives, and the reason(s) for the allocation. In response, the Corporation provided the Road Safety Financial Breakdown in the Application, and stated that:

- The Corporation is confident that its current model for investment in road safety is working, and new programming has been developed in accordance with best practice, including the requirement for a strong business case concluding that there is a potential return on investment for a given initiative.

- The Corporation's funding model does not establish an upper limit, or cap, on funding for road safety. It ensures that new programs are introduced, and programs are maintained only if a net benefit can be achieved.

In the 2016 GRA, the Corporation filed its Loss Prevention Strategy and Framework, which the Corporation explained brings all elements of loss prevention in scope and enables collective tracking. The Loss Prevention Strategy and Framework establishes loss prevention benchmarking to assess the reasonableness of the Corporation's program expenditures.

As the Board noted in Order 128/15, IBM recommended that MPI undertake three foundational efforts in parallel in relation to the comprehensive loss prevention strategy. Those efforts were: Change Management and Communication, Data Collection, Measurement and Evaluation, and Baseline Reporting. MPI provided an update on the progress of the implementation of IBM's recommendations and advised that:

- The governance structure recommended by IBM has now been fully adopted and implemented, and internal organizational change is in progress.

- The model recommended by IBM for identifying, developing and prioritizing new loss prevention programs or initiatives aligning with the Corporation's overall strategic planning process has been fully executed within the Road Safety Portfolio.

- IBM recommended a framework through which key performance indicators (KPIs) could be developed, tracked, and reported on, and a reporting framework to produce a measure of the return on investment for the Corporation's Loss Prevention and Road Safety programs. The Corporation has indicated that it has reviewed the proposed measures to validate or confirm the recommended KPIs, and, among other things, to determine if the data are available and are of suitable quality. The Corporation has identified that it has some challenges with the data that would be required in order to develop the KPIs. The Corporation stated that it is continuing to work on the methodological challenges it has encountered in its effort to implement the IBM recommendations, and expects that Phase I of Loss Prevention dashboard and scorecard will be complete in 2017.

The Corporation has stated that loss prevention initiatives are most effective when the Corporation engages with stakeholders. As initially indicated by the Board in the 2016 GRA, MPI has established an External Stakeholder Committee on Loss Prevention, which includes representatives from the Province of Manitoba, the City of Winnipeg, the Manitoba Motor Dealers Association, the CMMG, CAA, the Manitoba Trucking Association, the Automotive

Trade Association, Safety Services Manitoba, CAC, BW, and the Manitoba Association of Chiefs of Police. The Corporation indicated that members of the External Stakeholder Committee have been consulted on the Loss Prevention Strategy and Framework, and have received information about loss prevention programs and priorities.

The Corporation is also the co-Chair of the Provincial Road Safety Committee along with Manitoba Infrastructure. This Committee was initiated in 2015, to ensure that the principles of road safety are integrated into all aspects of transportation policy. The role of the Provincial Road Safety Committee is to develop a strategic and holistic approach to road safety, and facilitate prioritization of road safety issues. Terms of reference for the Provincial Road Safety Committee have been finalized. The primary deliverable of the Provincial Road Safety Committee is the Road Safety Plan, which the Corporation states is anticipated to be finalized by the end of 2016.

MPI reported that the Provincial Road Safety Committee hosted a Distracted Driving and Impaired Driving Summit in December 2015, which produced a consensus on key approaches to road safety. Arising out of the Summit was the recognition of a need for provincial data on the prevalence of drug use by drivers, in order to establish a benchmark prior to the anticipated federal legislative change legalizing the recreational use of marijuana. As a result, the Corporation funded a roadside survey in September 2016, intended to establish a baseline against which future trends in drug and alcohol use could be measured. The survey period is now complete and the Corporation advised that data gathering is complete. Approximately 1600 drivers were approached, and approximately 1200 of those approached chose to participate in the survey. The Corporation stated that now that data gathering is complete, the data will be analyzed and then report on the prevalence of both alcohol and drug use amongst the respondents.

The Corporation also indicated that outside of the formal stakeholder structures, it also has opportunities to work directly with industry stakeholders on specific issues of common interest.

As required by Order 128/15, MPI provided the Board with an update on the progress of the High School Driver Education (HSDE) Redevelopment initiative. MPI administers the HSDE Program, which provides approximately 12,000 new teen drivers annually with classroom and in-vehicle instruction. The Corporation had developed a roadmap for the implementation of the Redevelopment initiative, which is targeted for a gradual transition from 2016 to full implementation in 2020. The Corporation reported that it is targeting certain initiatives for fiscal 2016/17, which are:

- Incorporating the use of vehicle telematics and collision avoidance technology into the HSDE program.
- Conducting a proof of concept on the use of mid- and high-end driving simulators to allow more opportunity for interactive opportunities for in-car practice time.
- Exploring the use of mobile and online learning tools, to expand the Corporation's reach of information.

MPI also provided the Board with an update into the programs it is undertaking for Adult Driver Training programs that are being offered in Winnipeg and northern Manitoba. The Corporation advised that the Adult Driver Training involves three streams:

- MPI has partnered with Immigrant and Refugee Community Organization of Manitoba (IRCOM) to deliver an adult driver education program to new immigrants and refugees. Programming began in January 2015, and funding has been extended through 2018. IRCOM has expanded its current program to double its capacity, allowing expansion of services to serve the needs of Syrian refugees who have settled in Winnipeg under the federal government's accelerated admission program.
- MPI has partnered with the Government of Manitoba, Department of Jobs and the Economy, to improve access to adult driver training programs for individuals enrolled in job placement or readiness training programs in three northern Manitoba communities.
- MPI also launched a pilot partnership with Citizen's Bridge in 2012, to provide a modified version of the HSDE program to unemployed and underemployed residents in north Winnipeg, through the North End Community Renewal Corporation.

The Corporation advised that it has partnered with Bike Winnipeg along with other cycling stakeholders to launch two new pilot programs in 2016: Bike It! for would-be cycling commuters, and the Cycling Education in Schools project. The Corporation will also bring free cycling education to inner-city youth aged 9-14, at the University of Winnipeg Science Adventures Kids Summer Camp, operated through the University of Winnipeg Foundation. MPI will also be undertaking cycling safety research, including cooperation with the Winnipeg Regional Health Authority, to test the effectiveness of helmet legislation, a "Go Pro" project to collect video from cyclists in Winnipeg, and an intention to test new cycling helmet technology. The new helmet technology is designed to alert drivers when vehicles are in the cyclist's blind spot, and activates turn signals and brake lights based on the cyclist's body movements.

The Corporation provided the Board with information regarding its Intersection Safety Signage Pilot. The pilot was launched in January 2016, in partnership with the City of Winnipeg, Winnipeg Police Service, and CAA. This is a two-year pilot, to examine the effectiveness of high collision intersection safety in altering driver behaviour. The pilot will employ a combination of intersection signage, dedicated police enforcement and general public awareness at three high-collision intersections in the City of Winnipeg, with two additional high collision intersections serving as controls. Upon completion of the pilot, an evaluation will take place in order to assess the effectiveness of the signage measures. If proven successful, the project may be expanded to other high-collision intersections in Manitoba.

In Order 128/15, the Board required MPI to file in this Application, a report regarding the potential benefit of wildlife collision measures, including the option of erecting fences at "hotspot" locations, after having studied this issue. The Corporation included that report within the Application, the Wildlife Collision Mitigation Review and Cost Benefit Analysis. The Review confirmed the primary and most cost-effective interventions sought in North America, which are fencing and large animal warning and detection systems, and assessed them in the Manitoba context. This included a cost-benefit analysis for the Birds Hill Provincial park deer collision hotspot. According to MPI, the Review concluded that in Manitoba, infrastructure interventions remain cost prohibitive. As such, the Corporation indicated that it intends to focus its resources on public awareness and education initiatives. This will include the expansion of the use of variable message boards in wildlife hotspots in Manitoba.

The Corporation also provided information in the Application regarding its efforts to address the issue of road safety and mature drivers, as required by Order 128/15. The Corporation advised that, in its capacity as administrator of *The Drivers and Vehicles Act*, the Corporation is responsible for ensuring Manitoba drivers meet the regulatory standards to safely operate motor vehicles. The Driver Fitness Program addresses medical conditions that affect driving, and intervenes where drivers display high-risk driving behaviours. With respect to medical fitness, the Corporation advised of its efforts, which began in October 2015, to advise physicians on assessing a patient's fitness to drive and the physician's mandatory reporting obligation under *The Highway Traffic Act*. The Corporation also filed in its Application a report on the Driver Fitness Program, and medical conditions that affect safe driving ability, which includes information about outreach efforts, driver assessment programs, and mature driver training programs.

In PUB Order 135/14, the Board ordered that MPI:

- Provide an independent review of the optimal size of a road safety budget portfolio for the Corporation with a view to minimizing the economic and social costs of collisions; and

- Provide an independent review of the current road safety portfolio with a view to optimizing it (relative to cost effectiveness and to setting goals for outcomes) and minimizing the economic and social costs of collisions.

MPI engaged Jennifer Kroeker-Hall, of Sirius Strategic Solutions, to conduct a review of the Corporation's road safety budget and portfolio. The Corporation filed Ms. Kroeker-Hall's report in the 2016 GRA, but did not produce her as a witness. In Order 128/15, the Board ordered that the Corporation produce Ms. Kroeker-Hall as a witness in the 2017 GRA. In her report, Ms. Kroeker-Hall had found that MPI had chosen a road safety framework which is intended to optimize its funding and is a creditable and supportable approach to successful road safety programming. She also made a number of recommendations. Ms. Kroeker-Hall appeared as a witness and testified as to the findings, opinions and conclusions in her report. Ms. Kroeker-Hall testified as an expert in road safety, including the planning, design, implementation and assessment of road safety programs and policies, and the development of planning, funding, and governance frameworks for road safety.

Ms. Kroeker-Hall commented that road safety planning needs to be flexible and evidence-based, consultative, and evaluative. To that end, Ms. Kroeker-Hall commented that MPI's three-year Road Safety Operational Plan has committed to monitoring the effectiveness of individual programs, portfolios, and loss prevention expenditures. She noted that the framework in place within MPI allows for priority validation and issue analysis within its priority setting and program development framework, and employs a methodology for ensuring the appropriate priorities are set.

Ms. Kroeker-Hall also suggested that in the years ahead, it would be valuable to assess whether the funding and the approval of priorities match the resources allocated to support the priorities that the Corporation has set for itself. She concluded that, in comparison to other Canadian jurisdictions, MPI's road safety model has evolved into a more sophisticated and comprehensive model in terms of what she considers to be the key elements required of a road safety framework.

With respect to funding of road safety, she concluded that there is little evidence as to the appropriate size of a road safety budget. In her review of other Canadian jurisdictions, she found little consistency in terms of how dollars were allocated to various program areas. She commented that MPI's approach for allocating resources to road safety initiatives is research-based, data-driven, and based on evaluative and research evidence. The framework also recognizes that funding priorities will shift as the evidence changes. To Ms. Kroeker-Hall, this recognizes a commitment to flexible funding that meets the required funding needs.

MPI indicated that its road safety priorities for 2016/17 have been divided into three categories: behaviour change issues, other loss prevention issues, and emerging issues. The top priorities have been identified as:

- Behaviour change priorities: Distracted driving, speed, and impaired driving.
- Loss prevention priorities: Collisions with animals, lost control/drove off road, and failure to yield right of way.
- Emerging issues: Mature drivers, autonomous vehicles, and traffic safety culture (toward zero fatalities).

In its Application MPI filed information regarding the incidence of fatal collisions in 2015 on a preliminary basis, along with the incidence of fatal collisions in 2014 and statistics of averages for fatal collisions for the periods from 1994-1998, 1999-2003, 2004-2008, and 2009-2013. The statistics provided by MPI indicate that Manitoba is improving its ranking against other Canadian jurisdictions based on 2014 statistics from Transport Canada. It appears that 2014 was a year of record lows for fatalities in Manitoba, at 68. The incidence of fatalities for the calendar year 2015 was 78 on public roadways. There appears to have been a spike in the number of fatalities in Manitoba reported to date at the time of the GRA hearing, of 85 fatalities. The Corporation indicated that 70% of those 85 fatalities were on rural roads, which reflects a problem with highway speeds in rural areas. In addition, 25% of the fatalities involved victims under the age of 25, which is indicative of what the Corporation recognized as a continued overrepresentation of young people in collisions. In addition, the data indicate that there has been an increase in the number of fatal collisions involving impaired driving or speed.

With respect to the Driver Safety Rating (DSR), in Order 128/15, the Board ordered that MPI provide an update regarding the perceived impact of the DSR on claims frequency and severity. MPI filed its analysis with the Board in this Application. The DSR was introduced in 2010, and recognizes safe driving behaviour by offering financial incentives to drive safely. The conclusion reached by MPI in its analysis is that it is a key driver of collision frequency within the range of loss prevention interventions employed by the Corporation. The Corporation estimates that since its introduction, there has been a reduction of approximately 39,000 collision claims related to the DSR, for an estimated reduction in losses in the approximate total amount of $124.5 million. The Corporation has indicated that it typically would require ten years of experience before it would be in a position to make adjustments to driver premiums and vehicle premium discounts based on experience-driven indicated values.

7.1. Interveners' Positions

BW

Bike Winnipeg argued that Ms. Kroeker-Hall was not qualified to speak on the issue of the optimum size of MPI's road safety budget, and whether the budget is sufficient to reduce the cost to MPI of injuries to vulnerable road users. BW argued that Ms. Kroeker-Hall could not demonstrate in a convincing way that there was enough evidence before the Board for it to come to a conclusion as to whether MPI has optimized its road safety budget. In addition, there was little evidence from Ms. Kroeker-Hall as to the setting of overall road safety programs and models that take into account the social costs of collisions. BW also noted that Ms. Kroeker-Hall had not conducted an analysis or comparison of road safety program models in other jurisdictions, such as SGI in Saskatchewan, to a degree that would permit her to make a comparison between SGI and MPI's models.

BW pointed out that Ms. Kroeker-Hall did acknowledge, that in jurisdictions where quantitative road safety targets are set, there is a positive statistical association between the setting of those targets and the percentage reduction of fatalities. However, BW argued that Ms. Kroeker-Hall's evidence was not helpful in answering the central question of the optimal size of the Corporation's road safety budget with a view to minimizing the economic and social costs of collisions, nor did Ms. Kroeker-Hall's evidence provide any information on the social costs of collisions.

On the question of the quality and clarity of MPI's data collection, analysis and accessibility regarding collisions involving vulnerable road users (VRUs), BW noted that improvements need to be made. For example, there are no specific data reports or studies regarding distracted pedestrians or distracted VRUs. BW also expressed concerns with the data made available by MPI in the context of the Application − that the data do not originate from MPI's Enterprise Data Warehouse.

BW stated, that from its perspective, MPI's road safety model ignores societal costs of fatalities and raised concerns with the size of the road safety budget. BW was also critical of the quality and clarity of MPI's data collection and analysis regarding vulnerable road users and the social costs of collisions.

BW also commented that MPI has not clearly articulated its intention or vision with respect to its road safety model − whether its focus is on a "Safe Systems" approach, or a "Vision Zero" target. Further, while MPI has stated that it had adopted a Safe Systems approach, MPI has also stated that it does not have jurisdiction over all of the elements comprising a Safe Systems approach.

CAC

CAC stated that MPI, as compared to the other Western Canadian Crown insurers, is playing "catch-up" regarding cost/benefit analysis of road safety programming and the optimization of the road safety portfolio. In addition, CAC argued that there was insufficient evidence in Ms. Kroeker-Hall's evidence for the Board to be able to draw conclusions as to whether MPI was optimizing its loss prevention and road safety portfolio. However, CAC did stress that in its view, the Corporation has made sincere efforts to improve upon its loss prevention and road safety programming, including the development of business cases for programming. Effective road safety planning requires clear criteria for justifying a given initiative, and CAC noted that SGI and ICBC use cost/benefit analyses in determining road safety priorities, and SGI looks not just to claims costs, but also to social costs of collisions.

CAC's view was that because the Corporation is still implementing its loss prevention and road safety model, no final determinations can be made as yet as to whether MPI has optimized its road safety budget. Lastly, CAC stated that in its view it is important for MPI, in consultation with stakeholders, to adopt a target for the reduction and/or elimination of accidents, fatalities, and collisions. CAC argued that the road safety portfolio should be optimized based on good analytics and business principles, taking into account both claims costs, and social costs. CAC also asked that the Corporation be required to report back on its efforts to leverage other stakeholders to invest in road safety initiatives.

CMMG

CMMG expressed its view that MPI's designation of $63,000 out of a $13.2 million budget for wildlife collision prevention measures is an insufficient amount. CMMG stated it is concerned about the effect that wildlife collisions can have on motorcyclists, who are VRUs. CMMG argued that the Corporation's intention to focus only on the use of road signage in targeting wildlife collision prevention was insufficient. Other measures, such as selective feeding, fencing, birth control, and culling of herds should be explored. Reliance by the Corporation on developments in vehicle technology such as infrared wildlife detection is unreasonable from CMMG's perspective, because it is prospective and based on technology that will not be prevalent in the fleet for 8-12 years. Investments in auto crime prevention measures and student driver training, CMMG argues, does not serve to protect VRUs, motorcyclists particularly.

CMMG also stated that it would like to see rebates provided to motorcyclists who participate in MPI's experienced rider programs.

CAA

CAA stated that it was pleased with the Corporation's efforts to improve the HSDE program, and to provide driver education to northern Manitobans and to immigrant and refugee communities through IRCOM. CAA encouraged MPI to work diligently, persistently and collaboratively with stakeholders to move forward with public education and pursue substantial penalties for drug-impaired driving. CAA also expressed concern regarding the incidence of distracted driving and stated that distracted driving education and awareness programs should take up a larger proportion of MPI's road safety budget.

7.2. Board Findings

The Board notes, with concern, the evidence in the hearings that the rate of fatalities on Manitoba roadways has seen a significant increase in 2016. The Board also notes that 70% of the 85 fatalities to date in 2016 at the time of the hearing were on rural roads, which points to a particular concern with the risk of fatalities in rural areas. This spike in fatalities is alarming to the Board and the Board is of the view that the Corporation must take the initiative, and take a more aggressive approach, towards prevention of collisions and fatalities on Manitoba roadways. The Board recognizes that MPI has taken steps towards a more comprehensive approach to road safety programming through the Loss Prevention and Road Safety Framework and through stakeholder engagement; however, the Board finds that the Corporation is lacking in an overall, comprehensive, vision and strategy in respect of road safety programming and goals. Further, the Board finds that the Corporation has expressed on occasion that it cannot take the initiative for certain road safety planning or programming on its own, given its mandate and jurisdiction. The Board finds that this position is not satisfactory.

The Board therefore orders that in the 2018 GRA, MPI file a five-year strategic plan with respect to its road safety programming, including: the overall budget and breakdown; targets for reduction of collisions and fatalities; all priorities for road safety programming; how the Corporation's strategy for addressing and targeting road safety issues such as distracted driving, impaired driving including drug-impaired driving, wildlife collisions, mature drivers, and vulnerable road users. The strategic plan shall include what the Corporation considers to be its challenges in executing or implementing any road safety initiatives, from a budgeting or jurisdictional perspective.

The Board also orders that in the 2018 GRA, the Corporation provide information on any of its road safety efforts directed at reducing collisions in rural areas in Manitoba.

The Board also finds, based on the evidence from the Corporation itself and through Ms. Kroeker-Hall, that MPI's road safety planning and portfolio has not yet reached maturity. The Board also finds that further, detailed information regarding the expenditures on road safety programming in other jurisdictions would assist it in assessing whether the Corporation is optimizing its road safety budget. The Board directs that in the 2018 GRA, the Corporation provide to the Board an analysis of the road safety budgets of SGI and ICBC, including the specific mandate of those insurers, their annual road safety budgets and budget breakdown by initiative, as compared to the Corporation's road safety budget.

The Board finds that MPI is working towards the implementation of the Loss Prevention and Road Safety Framework and is hopeful that the use of the framework dashboard and scorecard will serve to optimize its road safety program spending. The Board directs that in the 2018 GRA, the Corporation report on the progress of the Loss Prevention and Road Safety Framework and produce the framework dashboard and scorecard. The Board also directs that the Corporation provide it with updates on its work in conjunction with its stakeholders and therefore directs that in the 2018 GRA, the Corporation provide it with updates into the activities of the External Stakeholder Committee on Loss Prevention and the Provincial Road Safety Committee. The Board also directs that the Corporation file the Road Safety Plan prepared by the Provincial Road Safety Committee, and produce a witness from the Government of Manitoba in the 2018 GRA hearings, to provide a presentation on the Road Safety Plan.

The evidence in this GRA indicates that the Corporation is mindful of the challenges in road safety that may be on the horizon due to the Government of Canada's intention to legalize the recreational use of marijuana. The Board is hopeful that the road side survey undertaken by MPI in September of 2016 will provide useful data for road safety planning and programming. The Board therefore directs that in the 2018 GRA, the Corporation file an update on the results of the roadside survey conducted in September 2016, and provide:

- Information as to the Corporation's plans to target the issue of drug-impaired driving and marijuana-impaired driving in particular; and

- Any statistics or information available to it regarding the prevalence of marijuana use among drivers.

The Board accepts CMMG's position that the experienced rider program in its current form is cost prohibitive, and finds that there should be an incentive for riders to take the program. The Board refers to the evidence cited by CMMG that there are on average, approximately 180 motorcycle accidents per year with one or two serious losses. The Board finds that effective experienced and novice motorcycle safety training programs could have major benefits in reducing motorcycle collisions, and in turn, claims costs. The Board therefore directs that in the 2018 GRA, MPI provide an estimate of the cost to MPI of providing full reimbursement or reimbursement of 50% of the cost of the experienced rider program to those who complete the program.

The Board also directs the Corporation clarify its stance on the use of a Safe Systems model or a Vision Zero target for collisions. The Corporation's position appears to be that it cannot undertake either of these efforts on its own given its mandate and the need for other stakeholders and Government to be involved in issues such as infrastructure. The Board recommends the Road Safety Committee set out its position on the Safe Systems model prior to the filing of the next GRA. The Board also directs the Corporation to provide information to the Board regarding its intention and/or efforts, if any, to employ consideration of social costs of collisions to set road safety programming priorities.

Given the significant proportion of the road safety budget that is allocated to the HSDE program, the Board also orders that, in the 2018 GRA, MPI file an update on the progress and effectiveness to date of the HSDE Redevelopment.

The Board notes the conclusions of the Wildlife Collision Mitigation Study and is aware that the Corporation intends to employ signage to target reduction of wildlife collisions. The Board finds the frequency with which wildlife collisions occur as stated in the study, and also finds that fencing is considered a useful mitigation measure in other jurisdictions. Although there are topographical differences in Manitoba that may or may not affect the usefulness of fencing in our province, the Board directs that further study of this mitigation measure be employed, including discussion with other jurisdictions that employ wildlife collision management plans, in order to determine whether it may be a worthwhile effort in Manitoba. The Board also directs that the Corporation work with CMMG on a proposal for a pilot project involving the use of fencing in order to study its effectiveness in reducing wildlife collisions.

Lastly, the Board appreciated hearing from MPI's Vice-President, Business Development & Communications and Chief Product Officer on the issue of road safety in the public hearings. The Board orders that the Vice-President, Business Development & Communications and Chief Product Officer appear as a witness in the 2018 GRA public hearings to speak to road safety.

8. PRESENTERS

The Board heard from a series of presenters at the hearing of the Application. The presenters are not sworn witnesses and were not cross-examined. As such, although the content of the presentations is not evidence, the Board, MPI and the interveners received the information presented for consideration only. As always, MPI will respond to each presenter in writing, with respect to the presentation made to the Board and file a copy of the response with the Board.

Doug Houghton

Mr. Doug Houghton, a Director and Past President of the CMMG, spoke on his own behalf. Mr. Houghton stated that current premiums remain prohibitive for many, and premiums have become an extreme financial burden for some motorcyclists, particularly when coupled with costs of living and rising fuel costs. He commented that there are many former motorcyclists who have quit riding, because they cannot justify the expense of the premium. Mr. Houghton stated that he had been pleased with premium reductions in previous years and is disappointed with the request by MPI for a rate increase.

He questioned the current methodology for allocating losses, due to what he outlined as certain inequities:

- Motorcyclists being placed in a separate rating classification due to the severity of their injuries, despite that there are greater percentages of motorcyclists with full merits than automobile owners.
- Although PIPP coverage is paid by most vehicle owners, some vehicle classes do not pay and are being subsidized by premiums paid by other motor classes.
- Individuals with drivers' licenses but without vehicles are not contributing even though they may have caused or contributed to the accident cost.
- Off-road vehicles, dirt bikes, snowmobiles and bicycles do not contribute to PIPP but may receive PIPP benefits if they are injured in a collision.

Mr. Houghton suggested there ought to be a new methodology for assigning PIPP costs to premiums. He suggested that the fairest way might be to establish a flat rate for PIPP premiums in order that those premiums are spread equally across all vehicle groups, with increases based on experience and driving record, not severity of injuries. He also suggested assigning a greater share of PIPP premiums to larger vehicles, or transferring PIPP costs to the cost of a driver's license. Mr. Houghton stated that the current system encourages high risk drivers to transfer ownership of their vehicles to other family members with better driving records, in order that overall, a lesser premium is paid to the Corporation. Mr. Houghton also stated that most motorcyclists own another vehicle, and hence pay PIPP premiums on both vehicles, but are only able to drive one vehicle at a time, which results in one vehicle or the other remaining unused.

Mr. Houghton recognized that some of the matters to which he spoke involved public policy, and were not within the mandate of the Board, but Mr. Houghton requested that the Board recommend that MPI and/or the Province of Manitoba study the issue of a flat rate for PIPP premiums, and learn how such a system would affect average premiums for all classes, along with examining how premiums would be affected should excluded vehicle classes be required to pay PIPP.

Mr. Houghton thanked MPI for its support and participation in CMMG's annual motorcycle safety awareness rally. He also commented that many older and long-term riders have not taken any formal or classroom training, and that the Experienced Rider Program but its cost has led to minimal participation in the program. As such, he expressed the view that some financial incentive, such as a rate reduction, might increase participation.

Canadian Fleet Services

Canadian Fleet Services made a presentation to the Board, represented by its counsel Michael Chartier. Canadian Fleet Services is in the business of transporting motor vehicles, including cars, trucks, and heavy equipment. It has been in business since 1982, and serves approximately 5000 customers annually.

The issue on which Canadian Fleet Services appeared to present to the Board was regarding single-vehicle transportation, where Canadian Fleet Services drives the vehicle itself rather than having the vehicle transported. In such circumstances, Canadian Fleet Services would drive the vehicle from one point to another, within or outside of Manitoba. In those cases, a dealer plate is placed on the vehicle being driven by Canadian Fleet Services. For over 40 years, MPI has provided specialty license plates for business such as Canadian Fleet Services, also known as "dealer" plates. Canadian Fleet Services has 15 dealer plates, for which it pays $1500 annually. However, in 2014, despite there being no legislative change, MPI began to take the position that dealer plates cannot be used for the Canadian Fleet Services' purposes. Canadian Fleet Services argued that this position is contrary to the governing legislation, *The Drivers and Vehicles Licensing Act*, and it is now required to purchase temporary permits for each vehicle transport. This presents certain obstacles for Canadian Fleet Services, for example, requiring powers of attorney to be executed by the owners of the vehicles in order for Canadian Fleet Services to purchase temporary permits. Canadian Fleet Services estimates that the cost of purchase of temporary permits could be in the range of $57,000 to $360,000 annually, as compared to the cost of using dealer plates at $45,000 annually. This increased cost is of concern to Canadian Fleet Services.

Canadian Fleet Services asked that MPI provide it to answers to questions that it had:

- Can MPI confirm that Basic temporary registration permit costs and the payment thereof flow into MPI's general pool?
- Is MPI aware of other individuals or entities making use of a dealer plate for single unregistered vehicle transports?
- Has MPI identified that transporters engaging single-vehicle transport such as Canadian Fleet Services have a higher incidence of accidents than other drivers?
- Has MPI considered the impact of shifting transporters from the dealer plate pool to the general pool from a rating perspective?
- Has MPI considered the impact on the general consumer of requiring transporters such as Canadian Fleet Services to make use of temporary permits from a costs perspective, both with respect to the cost to purchase the permits, and the administrative effort required?

During the hearing the Board asked MPI to designate a person in the Corporation to discuss these issues with Canadian Fleet Services.

Robyn Grey

Mr. Grey presented as a member of the public. He stated that he has been in the motorcycle business for approximately 50 years, as the owner of motorcycle shops. He also advised that he was a founder of the CMMG.

Mr. Grey's presentation focused on one area, MPI's marketing and selling of the insurance so there is an increase in the value of a motorcycle when parts are installed, or custom work is done on the motorcycle. He stated a problem arises when a motorcycle is a total loss, or write-off. He gave as an example an owner who discovered at that time, when making a claim, that he was not insured for the total value of the custom work or improvements to the motorcycle. Mr. Grey stated that when the owner purchased insurance, the agent asked the client if he or she wanted extra value coverage, and the customer accepted the coverage, to find out later that MPI has offered less than the appraised value of the motorcycle, despite the owner having proof of the expense paid for the custom or additional work.

Mr. Grey stated that was but one example, but that he has encountered many such stories. In his view, this is an area that requires improvement and suggested that there be a review of this situation.

9. IT IS THEREFORE RECOMMENDED THAT:

9.1. The Board's jurisdiction be extended to include the Extension line of business, including rates and target capital levels, as well as the SRE target capital levels.

10. IT IS THEREFORE ORDERED THAT:

10.1. There shall be an overall 3.7% rate increase in compulsory Motor Vehicle Premiums for 2017/18 insurance year, effective March 1, 2017 for all major classes combined, which rate increase BE AND HEREBY IS APPROVED. This rate increase is as derived by the Corporation in accordance with accepted actuarial practice, including for the Motorcycle Major Class the one-time use of nine years of historical experience instead of the usual ten years.

10.2. The Corporation shall file for approval by the Board, within five business days from the date of this Order, a table of indicated rate changes and approved rate changes (i.e., after capping and rebalancing) by Major Class (and overall) reflecting the approved overall 3.7% rate increase.

10.3. MPI's requests that there be no change in Permit and Certificate rates, Vehicle Premium Discounts and Driver License Premiums, Service and Transaction Fees, Fleet Rebates or Surcharges, or the discount on approved after-market and manufacturer/dealer installed anti-theft devices BE AND HEREBY ARE APPROVED.

10.4. In the 2018 GRA, MPI provide a zero-based budget for staffing using actual staffing levels as a starting point for forecasting purposes and demonstrate on that basis, the targeted staffing level reductions identified by the Corporation.

10.5. In the 2018 GRA, MPI report on specific targeted savings forecast in the Application and compare with actual results.

10.6. MPI continue its efforts to find further savings beyond the $9 million identified in 2017/18 and 2018/19 and in the 2018 GRA, file an update with respect to additional cost containment efforts relative to staffing levels and compensation expenses.

10.7. MPI assess further opportunities for savings relative to external IT consultants, including a review of whether further savings can be achieved by bringing any of those consultants in-house and optimizing IT staffing levels in general, and file the results of its IT in-sourcing efforts in the 2018 GRA.

10.8. In the 2018 GRA, MPI file an overall five-year strategic plan with respect to its IT projects. The plan shall include all major projects, including the IT Modernization and PDR projects, full business cases with cost/benefit financial metrics for each of the projects, shall clearly articulate the benefits of the projects and provide updates on their progress to implementation.

10.9. MPI shall provide a further updated briefing on the distributed estimating pilot, and any other pilot of the PDR project at the next GRA, to take place no later than May 31, 2017.

10.10. In the 2018 GRA, MPI file an independent assessment on the development and roll-out of the PDR Project, including the progress of the pilots, the timing of full implementation, the costs of the project and the anticipated savings to be derived from the project. This project cost/benefit analysis shall incorporate all maintenance costs in the program evaluation.

10.11. MPI seek to gain insight on longer tail experience from outside, and in particular from Société de l'assurance automobile du Québec (SAAQ), and report back on the results of its efforts in the 2018 GRA.

10.12. In the 2018 GRA, MPI shall provide a full set of preliminary benchmarks to assess the performance of BI^3.

10.13. MPI obtain an updated ALM study to be filed in the 2018 GRA, which study shall address each of the 18 recommendations made by Mr. Viola, as set out in Appendix E hereto.

10.14. MPI shall participate in a Technical Conference on Interest Rate Forecasting, at a date to be mutually agreed upon as between the Board and MPI, but which date shall be sufficiently early such that the information shared in the Technical Conference will be included in the 2018 GRA.

10.15. The use of scenario testing adapted from the annual Basic DCAT investigation for purposes of setting Basic target capital levels, expressed in terms of Basic total equity shall continue to be used by MPI.

10.16. The Corporation shall include MCT calculations for all scenarios in its DCAT investigation and target capital analysis.

10.17. The amount of $159 million of Basic total equity for the setting of the lower threshold for the Basic target capital range, based on the 2016 Basic DCAT investigation and target capital analysis, Combined scenario, is hereby approved.

10.18. The Board withdraws its support, which was granted on a notional basis only in the 2016 General Rate Application, for setting the Basic target capital range upper threshold on the basis of 100% MCT, and directs that the 2018 General Rate Application shall include the appropriate scenarios in support of its proposed upper threshold for the Basic target capital range. This includes the iterative approach favoured by the Board as substantially reflected in MPI Exhibit #77, and also includes testing of at least 99^{th} and 99.5^{th} percentile outcomes.

10.19. With respect to the Basic target capital range upper threshold, the 2018 General Rate Application assess the upper threshold based on consideration of both the likelihood of triggering an RSR rebuilding fee, and the likelihood of exhausting Basic total equity.

10.20. The collaborative process on the use of the adaptation of the DCAT for setting of Basic target capital levels be continued.

10.21. A Technical Conference on the use of the DCAT for setting of Basic target capital levels and on Basic Ratemaking in Accordance with Accepted Actuarial Practice be held at a date to be mutually agreed upon as between the Board and MPI, but which date shall be sufficiently early such that the information shared in the Technical Conference will be included in the 2018 GRA.

10.22. Starting with the 2018 GRA, MPI's rate proposal, both overall and by Major Classification, will be anchored on rate level indications derived in accordance with accepted actuarial practice in Canada.

10.23. In the 2018 GRA, the Corporation file a five-year strategic plan addressing all of its road safety programming, including:

- The overall budget and breakdown;
- Targets for reduction of collisions and fatalities;
- All priorities for road safety programming,
- The Corporation's strategy for addressing and targeting road safety issues such as distracted driving, impaired driving including drug-impaired driving, wildlife collisions, mature drivers, and vulnerable road users.
- What the Corporation considers to be its challenges in executing or implementing any road safety initiatives, from a budgeting or jurisdictional perspective.

10.24. In the 2018 GRA, the Corporation provide information on any of its road safety efforts directed at reducing collisions in rural areas in Manitoba.

10.25. In the 2018 GRA, the Corporation provide to the Board an analysis of the road safety budgets of SGI and ICBC, including the specific mandate of those insurers, their annual road safety budgets and budget breakdown by initiative, as compared to the Corporation's road safety budget.

10.26. In the 2018 GRA, the Corporation report on the progress of the Loss Prevention and Road Safety Framework and produce the framework dashboard and scorecard.

10.27. In the 2018 GRA, the Corporation provide an update into the activities of the External Stakeholder Committee on Loss Prevention.

10.28. In the 2018 GRA, the Corporation provide an update into the activities of the Provincial Road Safety Committee.

10.29. In the 2018 GRA, the Corporation file the Road Safety Plan prepared by the Provincial Road Safety Committee and produce a witness from the Government of Manitoba in the 2018 GRA hearings, to provide a presentation on the Road Safety Plan.

10.30. In the 2018 GRA, the Corporation file an update on the results of the roadside survey conducted in September 2016, and provide:

- Information as to the Corporation's plans to target the issue of drug-impaired driving and marijuana-impaired driving in particular; and
- Any statistics or information available to it regarding the prevalence of marijuana use among drivers.

10.31. In the 2018 GRA, the Corporation provide an estimate of the cost to MPI of providing full reimbursement or reimbursement of 50% of the cost of the experienced rider program to those who complete the program.

10.32. In the 2018 GRA, the Corporation clarify its stance on the use of a Safe Systems model or a Vision Zero target for collisions.

10.33. In the 2018 GRA, the Corporation provide information to the Board regarding its intention and/or efforts, if any, to employ consideration of social costs of collisions to set road safety programming priorities.

10.34. In the 2018 GRA, the Corporation file an update on the progress of the implementation of the High School Driver's Education Redevelopment and on its effectiveness to date.

10.35. The Corporation further study the use of fencing to prevent wildlife collisions, including discussion with other jurisdictions that employ wildlife collision management plans, and in the 2018 GRA, provide a report on its further study of wildlife collision management plans.

10.36. The Corporation work with CMMG on a proposal for a pilot project involving the use of fencing in order to study its effectiveness in reducing wildlife collisions.

Board decisions may be appealed in accordance with the provisions of Section 58 of *The Public Utilities Board Act,* or reviewed in accordance with Section 36 of the Board's Rules of Practice and Procedure (Rules). The Board's Rules may be viewed on the Board's website at www.pub.gov.mb.ca

THE PUBLIC UTILITIES BOARD

"ROBERT GABOR, Q.C."
Chair

"DARREN CHRISTLE, MPA, B.A., CCLP, P.Log, MCIT
Secretary

Certified a true copy of Order No. 162/16 issued by The Public Utilities Board

Secretary

Appendix A

Glossary of Acronyms and Terms

Application	2017 General Rate Application
AOCI	Accumulated Other Comprehensive Income
Basic	Compulsory motor vehicle insurance
Board	Public Utilities Board
BW	Bike Winnipeg
CAA	Canadian Automobile Association
CAC	Consumers' Association of Canada (Manitoba) Inc.
CLEAR	Canadian Loss Experience Automobile Rating
CMMG	Coalition of Manitoba Motorcycle Groups
Corporation	Manitoba Public Insurance Corporation
DART	Driving Ahead in Real Time
DCAT	Dynamic Capital Adequacy Testing
DSR	Driver Safety Rating
Extension	Optional motor vehicle insurance
FTE	Full-Time Equivalent
Government	Government of Manitoba
GRA	General Rate Application
HRMS	Human Resource Management System

HTA	Highway Traffic Act
ICWG	Investment Committee Working Group (MPI)
IT	Information Technology
MGEU	Manitoba Government Employees' Union
Monopoly	Policies that can only be sold by one corporation (MPI)
MPI	Manitoba Public Insurance Corporation
Naïve Forecast	Interest rate forecast reflecting no change in interest rates from current levels
No-fault	Accident benefits not related to the fault of the driver
PDR	Physical Damage Re-engineering
PIPP	Personal Injury Protection Plan
Province	Government of Manitoba
RSR	Rate Stabilization Reserve
SIRF	MPI's Standard Interest Rate Forecast
SRE	Optional Special Risk Extension motor vehicle insurance

Appendix B

Appearances

C. Grammond / K. McCandless	Counsel for the Public Utilities Board (“the Board”)
M. Ghikas / M. Triggs	Counsel for Manitoba Public Insurance Corporation (“the Corporation”)
B. Williams / J. Wheeler	Counsel for the Consumers’ Association of Canada (Manitoba) Inc. (“CAC”)
R. P. Oakes	Counsel for the Coalition of Manitoba Motorcycle Groups (“CMMG”)
E. Miller	Canadian Automobile Association (Manitoba Division) (“CAA”)
C. Monnin	Bike Winnipeg ("BW")
H. Kaplan	AON Hewitt
M. Chartier / S. Goszer	Canadian Fleet Services ("CFS") (Presenter)

Appendix C

Witnesses

Witnesses for the Corporation

D. Guimond	President and Chief Executive Officer
L. Johnston	Chief Actuary and Executive Director of Pricing and Economics
H. Reichert	Vice-President Finance and Chief Financial Officer
W. Keith	Vice-President, Business Development & Communications and Chief Product Officer
J. Kroeker-Hall	President & Chief Executive Officer, Sirius Strategic Solutions
J. Spiropoulos	CFA, AON Hewitt
M. Geffen	Vice President, Gartner Consulting
Dr. S. Cleary	Professor of Finance, Queen's University

Witnesses for CAC

Dr. W. Simpson	Professor of Economics, University of Manitoba
A. Sherry	Actuary
V. Viola	Investment Risk and Management Consultant

Appendix D

Interveners

Canadian Automobile Association ("CAA")

Coalition of Manitoba Motorcycle Groups Inc. ("CMMG")

Consumers' Association of Canada (Manitoba) Inc. ("CAC")

Bike Winnipeg ("BW")

In-person Presenters

D. Houghton	Private Citizen
R. Grey	Private Citizen

Appendix E

Recommendations of Mr. Valter Viola to be addressed in updated ALM Study

1. **Clarity of Accounting Choices**: MPI should clarify what flexibility it has regarding the accounting for assets and liabilities, while remaining GAAP-compliant, and the factors it takes into account in electing to use one method/assumption over others.

2. **Adoption of More Comparable Accounting Principles**: In measuring its investment portfolio and liabilities, MPI should consider adopting accounting principles, where GAAP allows MPI to make such elections, that reduce the discrepancy between net income and comprehensive income (as these terms are currently defined by MPI), to improve comparability across all assets as well as liabilities. Comparability would be improved, for example, by accounting for more assets in a way that is consistent with the treatment of financial assets and liabilities at fair value through profit or loss ("FVTPL").

3. **AFS and HTM Accounting**: Unrealized gains and losses for AFS assets (~ 20% of assets), for example, are reported as "other comprehensive income (OCI)" and are excluded from net income until realized, making the net income recognition for unrealized gains on equities (~ 18% of assets) inconsistent with FVTPL assets. The treatment of HTM Bonds (25%), recorded at amortized cost, should also be re-considered.

4. **Pension Liability Accounting**: Reconsideration should also include the re-measurement of employee benefits (~ 15% of liabilities and equities) which is considered OCI. The re-measurement of employee benefits is large (given the long duration of pension liabilities), but OCI arising from changing interest rates that impact the value of pension liabilities is not recognized through transfers to net income under current practices.

5. **Return/Risk Definitions for Asset Mix Decision**: MPI should re-define return/risk used to inform its long-term asset mix decisions to be based on valuations that reflect market values, rather than accounting ones (which may be materially different). At a minimum, net income should be replaced by comprehensive income in the numerator (return) and retained earnings should be expanded to include accumulated other comprehensive

income (AOCI) in the denominator (risk). In the long term, market returns and market risks will determine average long-term premium rates, regardless of how assets and liabilities are accounted for under GAAP.

6. **De-Linking Discount Rates**: For purposes of long-term asset allocation decision-making, MPI should consider "breaking the link" (recursive) between liability valuations and the yield on some of its assets. Economic theory suggests this approach is more appropriate.

7. **Minimum/Maximum Asset Class Constraints**: The minimum/maximum and other constraints imposed on the portfolio (e.g., when asset-liability studies are conducted) should be reviewed and relaxed, to avoid costly constraints (lower risk-adjusted returns). The rationale for imposing any such constraints should be made explicit.

8. **Evolved Risk Framework**: An evolved risk framework should be considered to improve portfolio/risk measurement, management and/or governance.

9. **Explicit Risk Management Goals**: Among other things, the risk framework could include explicit goals related to market risk management (as well as goals related to other types of risk if those require enhancement). One goal might be to avoid "undue risk", which is risk that is taken:

- unknowingly, not having been identified (unaware); or
- knowingly, but which:
  - cannot be managed prudently, given current capacities (ineffective);
  - exceeds risk tolerances (prohibited);
  - is higher than it needs to be (inefficient); or
  - is not understood (uninformed).

Another goal might be to get paid better/well for those risks that are desired, with incentive systems that encourage desired behaviours that achieve desired outcomes and controls that monitor compliance with limits that discourage/prevent undesired behaviours and prevent undesired outcomes.

10. **Minimum Risk Portfolio**: A minimum risk portfolio (for market risk) should be clearly defined. It should be aligned with the interests of relevant stakeholders, with clarity regarding the short-term and long-term factors that impact rate sustainability and other important outcomes.

11. **Canadian Equities' 10% Minimum Allocation**: The appropriateness and prudence of having a 10% minimum weight to Canadian Equities ("to retain a meaningful exposure to home markets") should be reconsidered, given the different interests of different stakeholders (e.g., employees through the pension plan), the concentrated nature of Canada's equity market, and other such relevant considerations.

12. **No International Equities**: The appropriateness and prudence of having no exposure to International Equities should be reconsidered, given the large size of non-US foreign markets, the return opportunities that are potentially available from those missed opportunities and the effects of increased international diversification on long-term market risks.

13. **No Over-Reliance on Quantitative Modeling**: MPI should be vigilant about its potential over-reliance on quantitative considerations, given the high sensitivity of optimal asset allocations to seemingly small changes in capital market assumptions (returns, volatilities and correlations) and the large number of inputs.

14. **Exclusion of Real Return Bonds**: The role that RRBs can play in effectively managing relevant risks should be discussed, with consensus achieved regarding the effectiveness of RRBs from a risk management perspective (i.e., independent of the cost of any "insurance" as measured by RRB yields and their expected returns).

15. **Effectiveness of Duration Policy**: The effectiveness of the duration policy should be reviewed, given the inherent risks of changing real interest rates and unexpected inflation arising from MPI's liabilities, and exposure to changes in nominal interest rates in the MPI portfolio (i.e., nominal bonds without inflation protection). More specifically,

MPI should re-assess the effectiveness of its duration-matching strategy since inflation (actual and/or expected) may differ from current expectations.

16. **Integration of Real Estate/Infrastructure Liabilities in Duration Management**: MPI should consider the liabilities arising from all sources (i.e., including real estate and infrastructure) in its interest rate risk management practices (duration), to be consistent with its management of risks arising from insurance, pension and other liabilities. The financial leverage assumptions used in Asset-Liability Studies that support long-term asset mix decisions should be made consistent with the leverage actually used in the portfolio, removing the ~ 4% difference related to real estate debt.

17. **Removal of 105% Rule in Investment Policies**: MPI should remove from its Investment Policies the ability to request external managers to realize gains (losses) ("105% Rule"), which MPI says "is no longer relevant". This would remove an ability by MPI to cause a manager to realize gains (losses) for the sole purpose of having an impact on net income, without yielding any economic value, reducing risk or otherwise conferring another benefit on MPI.

18. **Pension Fund**: The interests of all relevant stakeholders should inform decisions regarding both the accounting for and management of the assets and liabilities related to the pension plan and other employee benefits. A desirable outcome is to have greater clarity around the appropriateness and prudence of maintaining different types of assets and liabilities commingled in one fund.