

# **MANITOBA PUBLIC INSURANCE**

**Round 2 Information Requests**

**2015 GRA**

**September 10, 2014**

**Public Utilities Board**

**Bike Winnipeg**

**Consumers' Association of Canada (Manitoba)**

**Manitoba Public Insurance**  
**2015 GRA Round 2 Interrogatories**  
**September 10, 2014**

**PUB (MPI) 2015 GRA Information Requests**

**PUB (MPI) 2-1**

Reference: 1<sup>st</sup> Quarter Report, PF.1, PF.3, PUB/MPI 1-121

- a) Please provide a breakdown of the first quarter claims experience by cover including separation of 2014/15 activity from run-off of prior years.
- b) With respect to the run-off of prior years provided in (a) above, please detail the portion attributable to changes in experience vs. the portion attributable to changes in valuation methodology vs. the portion attributable to changes in valuation assumptions, including commentary on the basis for this separation.
- c) Please advise as to whether the first quarter results were impacted by seasonality patterns in the claims experience.

**PUB (MPI) 2-2**

Reference: PUB/MPI 1-1

- a) Please provide the impact on Basic retained earnings of changing the weighted call centre contact ratio on the restatement of the financial results.
- b) Please provide all working papers and supporting calculations which underpin the decision to change the weighted call center contact ratio on a retrospective basis.

**PUB (MPI) 2-3**

Reference: PUB/MPI 1-4 (a) through (f)

The intention was for the restated PF.1 and PF.2 exhibits to be prepared also “separating out amounts relating to the premium deficiency reserves”, which would itemize such amounts in the Statements of Net Income (Loss) from Operations and the Balance Sheets. Please correct and re-file.

**PUB (MPI) 2-4**

Reference: PUB/MPI 1-6 (a)

Using the table in R.1, Page 5 and the information shown for the year ended February 2016:

- a) The calculated “Impact of Rate Change” ( $\$20,037 = 0.024 \times [\$849,098 - \$14,234]$ ) only captures the impact of the rate change for the vehicles already in the fleet at the start of the fiscal year, and excludes this impact for the vehicles newly entering the fleet in the 2016 fiscal year, each of which will also pay a premium at the increased rate level. Why is this appropriate for purposes of estimating the “Total Premiums Written Before Rebates” for the 2016 fiscal year?
- b) The calculated “Impact of Change in RSR Rebuilding Fee Adjustments” ( $\$8,549 = 0.010 \times [\$849,098 + \$20,037 - \$14,234]$ ) only captures the impact of the RSR Rebuilding Fee for the vehicles already in the fleet at the start of the fiscal year, and excludes this impact for the vehicles newly entering the fleet in the 2016 fiscal year, each of which will also pay an RSR Rebuilding Fee. Why is this appropriate for purposes of estimating the “Total Premiums Written Before Rebates” for the 2016 fiscal year?

**PUB (MPI) 2-5**

Reference: PUB/MPI 1-6 (g)

- a) Please provide an accounting of the introduction of and changes to service fees in the last ten years.
- b) Please advise of the criteria applied to determine when an associated work load change is significant enough to warrant a review of a service fee level.

- c) Please advise of how changes in technology introduced by MPI may impact current service fee levels.

**PUB (MPI) 2-6**

Reference: PUB/MPI 1-7

Please explain what is meant by "High Availability" and confirm when IBM will be considered fully functional for classification as normal operations.

**PUB (MPI) 2-7**

Reference: PUB/MPI 1-9

Please provide a history, since the inception of the Corporation, of changes to the Basic deductible.

**PUB (MPI) 2-8**

Reference: PUB/MPI 1-16, PUB/MPI 1-28 (a)

The forecasting of pension expense impacts the determination of investment income for rate-setting. In light of this, an understanding of how MPI determines its pension expense and how changes in discount rates impact that expense is useful. The change in discount rate last year from 4.20% to 3.90% resulted in a \$9 million loss that increased the pension expense. This year the discount rate has increased from 3.90% in 2012/13 to 4.30% in 2013/14, resulting in a \$15.3 million gain.

- a) Please provide a breakdown of the determination of pension expense for 2012/13 and for 2013/14 by the three components (change in reserve, actual benefit payments and the amortization of prior gains and losses) including how the \$15.3 million valuation gain in Appendix III of the valuation report is incorporated.
- b) Please explain what assumptions have been made for the discount rate and the pension expense for each of 2014/15, 2015/16 and 2016/17.

**PUB (MPI) 2-9**

Reference: PUB/MPI 1-13, PUB/MPI 1-19 Attachment

- a) To attempt to understand the reasonableness of using the equity returns for the Canadian market as a proxy for forecast investment returns for US equities for rate setting purposes, please provide historical returns of the US Equities market on a similar basis of those provided for the Canadian returns.
- b) Please provide the S&P and Russell 3000 total returns for the last five years.
- c) Please indicate the impact on investment income if US equity returns from (a) were utilized rather than the Canadian equity returns.

**PUB (MPI) 2-10**

Reference: PUB/MPI 1-17 (c)

The allocation of investment income impacts the requested rate increases.

- a) The answer provided did not answer the question posed. Please describe what line of business had a negative equity.
- b) How the negative equity was addressed?
- c) If there was a negative equity in that line of business last year, in the four year average, why is the Corporation making a change to the cost allocation methodology this year?
- d) Why would making a change eliminating an actual equity situation be a more fair representation for the allocation of investment income?

**PUB (MPI) 2-11**

Reference: PUB/MPI 1-23

Given the answer provided, please confirm that the Corporation's view of the probability of interest rate changes is based on an observation of the position of current interest rates relative to a floor and is not based on any supported technical analysis.

**PUB (MPI) 2-12**

Reference: PUB/MPI 1-29

- a) Has the Corporation considered expanding the number of its forecasters (National Bank, Laurentian Bank) so as to adopt an Olympic forecasting adjustment?
- b) Please indicate the impact on the proposed rate increase of applying a risk adjustment for interest rates, assuming that net income is retained at current levels.

**PUB (MPI) 2-13**

Reference: PUB/MPI 1-34

- a) Please regenerate the trend graphs by coverage provided in this response, overlaying the actual historical experience for each of the six Major Classes.
- b) Please provide a comparative table summarizing the selected annual trends by coverage for the current GRA with those selected for the two prior GRAs.
- c) Please discuss what consistency should be expected between the selected pure premium trends in the ratemaking analysis [RM Exhibit V] when combined with the selected volume factor of 1.75% [R.1.1, Page 9], vs. the forecasted annual change in ultimate incurred losses by accident year from the analysis of claims incurred [CI]. Please include with your response a comparative table summarizing the selected assumptions by coverage between the two analyses.

**PUB (MPI) 2-14**

Reference: PUB/MPI 1-38

Please provide a comparative table summarizing the selected assumptions by coverage between the two analyses.

**PUB (MPI) 2-15**

Reference: PUB/MPI 1-40 and 1-41

- a) Prior to the 2013 PIPP claims review, were case reserves being set consistently even if not in accordance with existing reserving guidelines?
- b) Over what period of time were deviations from existing reserving guidelines being applied prior to the 2013 PIPP claims review?
- c) Please discuss the rationale for the assumption that case reserves “will develop similar to prior development” as stated in the response to PUB (MPI) 1-40a) and 1-41a), considering that increasing case reserves at a point in time effectively accelerates incurred emergence
- d) Was consideration given to adjusting historical case reserves to reflect existing reserving guidelines, and then basing the analysis of incurred development on the restated historical development experience? If not, why not?
- e) Please discuss the Corporation’s view with respect to the extent to which the increase in case reserves triggered by the 2013 PIPP claims review was at all redundant with the IBNR provision held just prior to the 2013 PIPP claims review.

**PUB (MPI) 2-16**

Reference: PUB/MPI 1-45

This information request was specific with respect to the cash flows relating to the revenue at the indicated rate, whereas the response discussed cash flows relating to claims costs and expenses. Please discuss how the derivation of the estimated overall indicated rate change of +7.6% recognizes the present value of cash flows relating to the revenue at the indicated rate.

**PUB (MPI) 2-17**

Reference: PUB/MPI 1-46, PUB/MPI 1-47

- a) Considering the fixed income portfolio is assumed to underlie the actuarial liabilities for discounting purposes, please discuss the relative weights being assumed for the forecasted returns on fixed income investments versus equity investments for purposes of estimating the expected "Average Investment Income from [Basic Total] Equity" in the response provided to PUB (MPI) 1-46.
- b) Please restate the indicated rate change derived in accordance with accepted actuarial practice in Canada to reflect an assumed discount rate of 4.34%, derived as the average of the Corporation's projected discount rates at the beginning and end of the proposed rating period (4.15% and 4.53%, respectively).

**PUB (MPI) 2-18**

Reference: PUB/MPI 1-49

Please add to the response to PUB (MPI) 1-49 d) explaining how the possibility of distinct claim count and amount development patterns between the two groups is addressed, and specifying the extent of the total claims experience lost by excluding claims between \$100,001 and \$250,000.

**PUB (MPI) 2-19**

Reference: PUB/MPI 1-49 (b), PUB/MPI 1-49 (e), PUB/MPI 1-50, PUB/MPI 1-51

Please augment the discussion of the rationale for the selection of each of these trends, including reflection on the relative strength and performance of each selected regression model.

**PUB (MPI) 2-20**

Reference: PUB/MPI 1-52 (d)

Considering Mr. Guimond's pre-filed testimony in this regard, can the Corporation provide some sense as to how quickly and how significantly these automobile technological changes may impact Basic claims costs beyond what is already recognized in the GRA forecast?



**PUB (MPI) 2-21**

Reference: PUB/MPI 1-56

The Cost Allocation Methodology was to reflect the allocation of all Corporate costs among lines of business. Removing accounting units and cost allocators from the methodology does not reflect the full allocation methodology.

- a) Please file an updated Appendix 4 fully reflecting the cost allocation of all Corporate costs on a consistent basis with last year's application.
- b) Please provide a table that details for each IT/BTO project the methodology used to allocate costs between lines of business, the rationale for the allocation, and the allocation to Basic on a % and dollar basis. Please indicate which projects are new and are being allocated in 2014/15, 2015/16 and 2016/17.

**PUB (MPI) 2-22**

Reference: PUB/MPI 1-57 (a)

Please provide a breakdown by project of IT Optimization ongoing expenditures forecast for 2016 and 2017, with descriptions.

**PUB (MPI) 2-23**

Reference: PUB/MPI 1-69 (a)

This question addresses the trend of staffing levels and the impact on current and future operating results for rate-setting purposes.

- a) Please provide the Corporate Normal staffing level budget for 2014/15 and indicate to what extent it reflects the 30 FTE targeted staff reduction.
- b) Please provide the Corporate Staffing Levels for Implementation operations for 2009/10 through 2016/17.
- c) Please provide the total Corporate Staffing Levels for 2009/10 through 2016/17.

- d) Please provide a schedule detailing the number of contracted positions for 2009/10 through 2016/17.

**PUB (MPI) 2-24**

Reference: PUB/MPI 1-17 2014 GRA, TI.8

- a) Please provide in the detail provided in E.2.1.1 Compensation expense from 2009/10 through 2015/16 and indicate the relative % change in each cost category.
- b) The vacancy allowance increasing from \$269,000 in 2016 and \$257,000 in 2017 does not appear to reflect a targeted 30 FTE staff reduction. Please refile PF.1, PF.2 and PF.3 reflecting a total 30 FTE reduction in staffing levels in 2015/16 and E.2.1.1. Please provide supporting calculations.

**PUB (MPI) 2-25**

Reference: PUB/MPI 1-17,2014 GRA, TI.8

TI.8 last year reflected a \$10.9 million increase in compensation in 2010/11. In this year's filing, the Corporation provided a table indicating total Corporate salary increases of \$2.2 million.

Please reconcile the table of expenses on page 17 for Corporate with PUB/MPI 1-74 (a) from the 2014 GRA for 2010 through 2013 and provide the detail of Basic's share of compensation increases by Category.

**PUB (MPI) 2-26**

Reference: PUB/MPI 1-74 (a) & (b), CAC/MPI 1-76, CAC/MPI 1-77

- a) Please provide a comparison between the total budget for the HRMS project provided last year with the current GRA and explain the reasons for the variance.
- b) Please explain the increases in deferred development for the IT optimization project in 2014/15 and 2015/16 and indicate the nature of the expenditures.

- c) Please provide the requested supporting calculations for the IT provisions by project relative to the \$53.9 million in forecast spending.
- d) Please indicate what the Corporation is budgeting for contractor related and implementation costs for 2015/16 and 2016/17 related to these undefined projects.

**PUB (MPI) 2-27**

Reference: PUB/MPI 1-82

- a) Please provide total corporate expenditures in the level of detail found in Appendix 1 for 2009/10 through 2018/19 and provide the compound annual growth rate for 2009/10 to 2013/14, 2013/14 to 2016/17 and 2016/17 to 2018/19.
- b) Please provide the same detail as in (a) for Basic.
- c) Please provide the percentage of expenditures allocated to Basic.
- d) Please provide expense details, in a similar level of detail as the schedule on Expenses, page 4, by expense category, for 2010/11 through 2013/14 actual and 2014/15 to 2018/19 forecast for Corporate and Basic, that reconcile with the reported operating costs by cost category per the Annual Report and the Basic Annual Report filed with this application.
- e) For the schedule in part d) please provide an additional column indicating the associated FTE's by Normal, Initiative Implementation and Initiative Ongoing assigned to Basic and the total Corporate FTE's by year and relative % of Basic FTE's of Corporate.

**PUB (MPI) 2-28**

Reference: PUB/MPI 1-85 (b) and (c)

- a) Please explain how criteria that vary from one rating year to the next can be considered to be "predictable and clear"?

- b) If the near future unfolds as forecasted in the current GRA, would the Corporation anticipate filing for an increase or no change to the currently proposed RSR Rebuilding Fee of 1% in the next GRA, and why?

**PUB (MPI) 2-29**

Reference: PUB/MPI 1-90 (b)

Please advise of why there is no material increase to the overall Road Safety budget being forecast through the outlook period, either for existing or new programs.

**PUB (MPI) 2-30**

Reference: PUB/MPI 1-90 (d)

- a) With respect to Occupant Safety Strategies and Motorcycle Safety Education, please advise of why there have been reductions in advertising costs; has the Corporation engaged in less or different advertising or have costs reduced for some other reason?
- b) Are there any reasons other than reductions in advertising costs that have led to reductions in spending in 2013/14 for Occupant Safety Strategies and Motorcycle Safety Education?
- c) Please explain the reasons for reductions in spending in 2013/14 for Program Evaluation.

**PUB (MPI) 2-31**

Reference: PUB/MPI 1-106

This information request did not address the matter of why a 100% MCT ratio (vs. some other level of MCT ratio) was being proposed. The cited statements could be equally true of many choices of MCT ratio. The choice of a 100% MCT ratio to define an upper Total Equity target needs to be defended to assist the PUB in its assessment of the Corporation's proposal.

**PUB (MPI) 2-32**

Reference: PUB/MPI 1-107

Given that the “restated base forecast in the DCAT is the best estimate of projected operations”, please discuss the implications of the change in average forecasted net income over 2015/16 and 2016/17 (from about \$5.8 million to about \$9.6 million) for the Corporation’s proposed rate level change (before RSR Rebuilding Fee) of +2.4%.

**PUB (MPI) 2-33**

Reference: PUB/MPI 1-111

Please provide the Chief Actuary’s supporting rationale for his belief that the assumption that no rate change after 2014/15 is a reasonable assumption for DCAT purposes.

**PUB (MPI) 2-34**

Reference: PUB/MPI 1-112

Under what conditions would the Corporation give consideration to increasing the RSR Rebuilding Fee in 2016/17?

**PUB (MPI) 2-35**

Reference: PUB/MPI 1-115

- a) Please confirm that the “1 Year Government of Canada Marketable” data represents the 12 month movement in Government of Canada 10 Year Bond Yields.
- b) Please provide a table indicating the Government of Canada Bond Yields by month since 1956.

**PUB (MPI) 2-36**

Reference: PUB/MPI 1-117

The reference cited in response to this information request appears to address only the analysis of Equity Returns in isolation. Please provide the supporting analysis of “Correlation between Equity Returns and Interest Rate Movement”.

**PUB (MPI) 2-37**

Reference: PUB/MPI 1-121

On which basis of MCT computation does the Corporation propose the upper Total Equity target MCT ratio will be defined; as computed for recent historical ratios, or as forecasted in the DCAT?

**PUB (MPI) 2-38**

Reference: Financial Model Scenarios

- a) Please file the model scenarios printout, indicating the formulae represented in each cell. Please provide this level of detail for the following sheets: InvestAssumQu, InvestModelQu and DPAC for the Base Scenario.
- b) Please confirm that there are no changes in the formulae in the Alternative Scenarios. If not, please explain.

**PUB (MPI) 2-39**

Reference: Financial Model 4-Year Interest Rate Decline – Investment Assumptions  
Quarterly US Equity Returns: line 153

- a) Please explain why the Corporation assumed no change in exchange rate between the Canadian and US dollars under the interest rate decline scenario.
- b) Please indicate whether the Corporation has undertaken an analysis of currency risk. If so, please file that analysis. If not, how is currency risk factored into U.S. equity returns?
- c) Please explain why the US/CAD exchange rate is 1.0 and discuss the merits of utilizing Bank forecasts of US/CAD exchange rates in the Financial Model.
- d) Please explain how the exchange rate is influenced by changes in interest rates.

**PUB (MPI) 2-40**

Reference: Financial Model 4-Year Interest Rate Decline – Investment Assumptions  
Quarterly Yields on Canadian and US Equities: lines 116, 120, 124, 128, 132,  
157, 161, 165, 169, 173, DCAT Report p. 30

Please reconcile the stated dividend yields on equities per page 30 of the DCAT with those reflected in the financial model.

**PUB (MPI) 2-41**

Reference: Financial Model 4-Year Interest Rate Decline – Interest Rate Floor,  
InvestAssumQu: lines 25, 27

- a) Given that interest rates were at 1.68% for one day from 1989 to present, please discuss the reasonableness of assuming total returns on Marketable Bonds of 1.68% for eleven consecutive quarters in this adverse scenario.
- b) Please discuss how the interest rate decline assumption interplays with the assumed vehicle upgrade factor.

**PUB (MPI) 2-42**

Reference: Financial Model Combined Scenario

Please prepare an alternate Combined Scenario, with a complete set of supporting schedules, addressing only Equity Returns and Claims Incurred.

**PUB (MPI) 2-43**

Reference: Financial Model Equity Decline Scenario, 2 Year Equity Decline,  
InvestAssumQu Cells T:AA118

Please file support for the assumption that equity returns return to just normal levels after the assumed two-year equity decline.

**PUB (MPI) 2-44**

Reference: CAC/MPI 1-110 (c) & (d)

- a) Please describe the common practices used in the P&C industry for interest rate forecasting and compare with that used by MPI.
  
- b) Please indicate how SGI and ICBC forecast interest rates and compare with that used by MPI.



**BW (MPI) 2015 GRA Information Requests****BW (MPI) 2-1**

Reference: July 31, 2014 PUB (MPI) 1-1 Attachment, Quarterly Report, 1st QUARTER  
MAY 31, 2014, Page 13

Preamble: "The provision for unpaid claims, including adjustment expenses, is subject to variability. This variability is related to future events that arise from the date the loss was reported to the ultimate settlement of the claims. Accordingly, short-tail claims such as physical damage claims tend to be more reasonably predictable than long-tail claims such as Personal Injury Protection Plan (PIPP) and public liability claims. **Factors such as the receipt of additional claims information during the claims settlement process, changes in severity and frequencies of claims from historical trends, and effects of inflationary trends contribute to this variability.**"

- a) Please provide MPI data/information with respect to the frequency of claims from 2000 - 2014YTD, for short tail claims and long tail claims.
- b) Please provide MPI data/information with respect to the expected frequency of claims for short tail claims and long tail claims for 2015 - 2020.
- c) Please describe the types of property claims that may be considered long tail.  
Alternatively, please advise of the types of property claims that MPI considers long-tail.

**BW (MPI) 2-2**

Reference: July 31, 2014 PUB (MPI) 1-1 Attachment, Quarterly Report, 1st QUARTER  
MAY 31, 2014, Page 13

Preamble: **"The determination of the provision for unpaid claims, including adjustment expenses, relies on judgment, analysis of historical claim trends, investment rates of return and expectation on the future development of claims. The process of establishing this provision necessarily involves risks which could cause the actual results to deviate, perhaps substantially, from the best determinable estimate."**

- a) Please outline the process used by MPI for analyzing historical claim trends.
- b) If such a graph exists, please provide a graph and/or table of historical claim trends, including logistic regression trend line, and basic descriptive statistics.

**BW (MPI) 2-3**

Reference: PUB (MPI) 1-9 Reference: PFT of Dan Guimond, p. 16

Preamble: "If this approach is unsuccessful, the Corporation may consider recommending to the Government to raise the deductible. **Changing coverage, and in particular, decreasing coverage, would likely be a last resort.** The Corporation would recommend such an approach most reluctantly as it would have a negative impact on the ratepayers and the economy of Manitoba."

- a) Please indicate whether or not "decreasing coverage" or "changing coverage" refers to Personal Injury Protection Plan (PIPP) benefits.
- b) Please indicate if any consideration is being made by MPI to recommend to the Government to change the schedule of PIPP benefits provided to victims.

**BW (MPI) 2-4**

Reference: Report of the Autopac Review Commission, Volume 1: Summary of Main Conclusions and Recommendations, Judge Robert Kopstein, 1988.

Preamble: BW is concerned about the optimum size of the road safety budget as envisioned from the start of the no-fault system to the present.

- a) Please provide copies of the Recommendations No. 10.0, and 10.19 from the referenced report (Kopstein).
- b) Please provide MPI's budget (or outline thereof) in terms of "non-safety promotion" and safety promotion.

- c) Please describe MPI's development process and the recommendations made to the Government regarding the development of a "statutory budget allocation equal to a fixed percentage of the corporation's premium income" for safety promotion by MPI since the referenced report.
- d) Please indicate the government departments that have cooperated with MPI to enhance its safety promotions.
- e) Please advise of the amounts of the financial (or in-kind) contributions of each department to specific traffic safety programs coordinated by MPI.

**BW (MPI) 2-5**

Reference: Report of the Autopac Review Commission, Volume 1: Summary of Main Conclusions and Recommendations, Judge Robert Kopstein, 1988.

Preamble: BW is concerned about the quality and clarity of MPI's data collection, analysis and accessibility regarding collisions.

- a) Please provide the Recommendations No. 11.04 from the referenced report.
- b) Please advise how MPI has been consolidating information (or assisting with) on road and vehicle hazards and the reporting to Manitoba residents since the inception of no-fault.
- c) Is MPI aware of any other entities or organizations that are also responsible for the consolidation of information on road and vehicle hazards? If so, please list these entities and describe MPI's involvement with them.

**BW (MPI) 2-6**

Reference: Report of the Autopac Review Commission, Volume 1: Summary of Main Conclusions and Recommendations, Judge Robert Kopstein, 1988.

Preamble: BW is concerned about the adequacy of MPI's road safety programs regarding fatal and severe injury of cyclists within the context of the priorities.

- a) Please provide page 7 of the referenced report (Kopstein).
- b) Please outline how the price paid by consumers is commensurate with the road safety benefits expected by Manitoba residents.
- c) Please provide page 15 of the referenced report.
- d) Please indicate MPI's current understanding or interpretation of "public trust".
- e) Please indicate whether or not MPI distinguishes between policyholders and the public in general.
- f) Please provide and file page 19 of the referenced report. Please indicate MPI's position regarding the PUB as an "independent and objective critic."
- g) Please provide and file page 30 of the referenced report.
- h) Please indicate whether or not MPI's gives any consideration or priority to ensuring a reasonable living standard for all victim types.

**BW (MPI) 2-7**

Reference: Road Safety - SM.3 Attachment F: Accident Maps: Bicycle / Vehicle Collisions

Preamble: BW is concerned about the apparent clusters of collision in the Winnipeg, 2009-2013.

- a) Please provide an enlarged, cropped view of the map, within the downtown core (the area within Maryland, Main St., Portage Ave. and Notre Dame Ave.)
- b) Please provide an enlarged, cropped view of Main St. only with both bicycle-vehicle and pedestrian-vehicle indicated.
- c) Please provide access to the electronic data files (without personal identification information), in ESRI mapping file or Excel, including the XY coordinates, for both bicycle-vehicle and pedestrian-vehicle collisions that generated the attached map.

d) Please include the reported speed of the vehicle involved in the collision in iii) above.

**BW (MPI) 2-8**

Reference: Road Safety - SM.3 Attachment F: Accident Maps: Bicycle / Vehicle Collisions

Preamble: BW is concerned about the apparent clusters of collision in the Winnipeg, 2009-2013.

- a) Please provide the count of bicycle/vehicle and pedestrian/vehicle collisions within the downtown core.
- b) Please provide MPI's projection of the current estimate of ultimate costs of bicycle/vehicle collisions and pedestrian/vehicle collisions in the downtown core.

**BW (MPI) 2-9**

Reference: Road Safety - SM.3 Attachment F: Accident Maps: Bicycle / Vehicle Collisions

Preamble: BW is concerned about the apparent clusters of collision in the Winnipeg, 2009-2013.

- a) Please provide MPI's current and historical count of bicycle/vehicle and pedestrian/vehicle collisions along Main St.
- b) Please provide MPI's current estimate ultimate costs of bicycle/vehicle collisions and pedestrian/vehicle collisions along Main St.

**BW (MPI) 2-10**

Preamble: BW is concerned about the adequacy of MPI's current road safety training campaigns for children in general and particularly concerning cycling.

- a) Please advise of any programs, research or other information that MPI has or relies upon in support of behavioral training of children when making roadside judgments (e.g. crossing, routes, timing, etc)

- b) Please advise MPI's view or position regarding the strengths and weaknesses of trainer-provided safety training and parent-provided safety training of children.
- c) Please indicate MPI's consideration and/or position with respect to putting into place a dedicated, model traffic area for the training of children by trainers or parents to improve road safety.

**BW (MPI) 2-11**

Preamble: BW is concerned about the adequacy of MPI's current road safety efforts because a key role for a safety team is to negotiate with different stakeholders and build effective alliances with other local and national entities. How well the agendas of different entities align has considerable influence over the capacity of teams to mobilize local resources and to engage with Manitoba residents.

- a) Please provide a list of municipal, provincial and federal departments with which MPI has contacted (or who has contacted MPI), and outline the involvement with these departments and/or stakeholders with respect to MPI's safety team.
- b) Please outline specific road safety initiatives or programs contemplated or undertaken by MPI in partnership or with the support of rural municipalities regarding child road/bike safety.

**BW (MPI) 2-12**

Preamble: Bike Winnipeg is concerned about MPI's search for continuous improvement through novel concepts, ideas and techniques for road safety programming.

- a) Please indicate whether MPI has researched or made inquiries into the strategies and/or program for accident prevention used in air and train transportation in Canada.
- b) If MPI has made such inquiries, please advise if these strategies and/or programs contrast or are similar (and how) with MPI's current strategies and/or programs.

**BW (MPI) 2-13**

Reference: Overview OV. 5, 12 -13

Preamble: Value equation

- a) Please advise how the prevention of bodily injuries is reflected in MPI's value equation for Manitoba residents.
- b) Please advise the cumulative percentage change in bodily injury claims from 2001 to the present.

**BW (MPI) 2-14**

Reference: Volume 1, Pre-filed Testimony, Power-point

Preamble: Diagram regarding different operating environment and the Overview (OV.3 page 11) describes lower than anticipated fleet growth in 2013/14 which flows through to future years.

- a) Please provide this diagram with the years clearly indicated.
- b) Please provide an estimate of the time period or duration to "Prepare for the New Normal"
- c) Please provide MPI's best estimate of the duration required for 50% of Manitoba's fleet of vehicles to become operational, on a consistent basis, for "Autonomous Vehicles" and "Collision Avoidance Technology".
- d) Please provide information on the ability of these technologies to operate properly in Manitoba's winter climate on a consistent basis.
- e) Please provide information regarding the ability of these technologies to be by-passed by mechanics or turned off by operators.

- f) Please provide information of the sensitivity and specificity of these technologies for identifying and reacting to low mass, moderate speed (20-40kph) road users such as cyclists.

**BW (MPI) 2-15**

Reference: Overview OV.2

Preamble: Chart of "Average Annual Growth of Collision Costs / History of Rate Changes"

Please provide the equivalent chart for bodily injury costs / history of rate changes, and physical damage costs / history of rate changes

**BW (MPI) 2-16**

Reference: Volume 1, Pre-filed Testimony

Please advise whether the "greater severity of claims resulting in significantly higher claims costs" refers to property loss or bodily injury.

**BW (MPI) 2-17**

Reference: Overview OV.2

- a) Please advise on the relationship of interest rates to the number of registered vehicle and the impact on collision rates with cyclists and, in comparison, other Vulnerable Road Users.
- b) Please advise if MPI is aware of whether or not there is a relationship between the GDP growth and traffic congestion in urban areas.
- c) Please advise whether MPIs takes into account the population growth forecast for Manitoba when considering the impact of collisions with vulnerable road users such as cyclists.
- d) Please advise if MPI considers of has considered the impact of these trends on collisions with cyclists, and in comparison, other Vulnerable Road Users.



**BW (MPI) 2-18**

Reference: Volume 1, Pre-filed Testimony, Power-point

Preamble: Severity of last winter gave rise to" greater severity of claims resulting in increased claim costs"

- a) Please clarify whether "severity" in this context refers to physical damage or bodily injury claims.
- b) Please provide trend information regarding any increase in frequency and severity (according to the International Classification of Diseases (ICD10)) of bodily injury claims to cyclists, in comparison to pedestrians, during the winter months of the last five rate years.

**BW (MPI) 2-19**

Reference: Overview OV.3

Preamble: MPI advises that "Adverse winter driving conditions resulted in approximately 3% more collision and property claims than expected in the forecast. Impact \$16 million

- a) Please set out the impact of bodily injury claims and property claims separately.
- b) Please indicate the bodily injury claims by victim type.

**BW (MPI) 2-20**

Reference: Road Safety – SM.3

Preamble: MPI stated: "With respect to evaluation of road safety programs and campaigns, it remains very difficult to attribute specific road safety initiatives directly to reductions in claims and claims costs due to the complexity of road safety issues. Many confounding variables or factors ultimately influence collision frequency and severity. There is also the inability to measure collisions that "do not occur" as a result of successfully influencing road user behavior." The AAA study "Impact Speed and a Pedestrian's Risk of Severe Injury or Death"

([https://www.aaafoundation.org/sites/default/files/2011PedestrianRiskVsSpeed\\_0.pdf](https://www.aaafoundation.org/sites/default/files/2011PedestrianRiskVsSpeed_0.pdf))

found "the average risk of death for a pedestrian reaches 10% at an impact speed of 23 mph, 25% at 32 mph, 50% at 42 mph, 75% at 50 mph, and 90% at 58 mph." Some European cities are implementing 20 miles per hour or 30 kilometer per hour speed limits in their core areas (example; Bristol <http://www.bristol20mph.co.uk/faqs>).

- a) As an extreme example, if speed limits in downtown Winnipeg were reduced to 30 km per hour to improve road safety, would this be likely to have a measurable impact on claims?
- b) Is MPI aware of which types of claims would be reduced in such a scenario?
- c) Is MPI able to advise what would be the estimated total reduction in claims in such a scenario?

**BW (MPI) 2-21**

Reference: Road Safety – SM.3

Preamble: "Key risk groups are also identified by analyzing collision and claims data, including over-representation in collisions, as is the case with young drivers aged 16-25, or groups with higher propensity to fatality or serious injury if involved in a collision, as is the case with vulnerable road users such as motorcyclists, cyclists, and pedestrians."

- a) Please describe the process and factors involved in this analysis, and provide the ranking of risk groups identified as being over-represented in collisions.
- b) Please provide any reports, analyses or documents that describe or show the "higher propensity to fatality or serious injury if involved in a collision" of these groups.

**BW (MPI) 2-22**

Reference: Road Safety – SM.3

Preamble: MPI stated: "Manitobans are also surveyed regularly to monitor their attitudes, opinions and behaviours related to key road safety risks and consequences; results are used for programming planning and evaluation purposes."

Please file the statistically significant time series data sets on driver behaviour, attitudes and opinions for the last five years.

**BW (MPI) 2-23**

Reference: Volume 1, Pre-filed Testimony, page 17

Preamble: The PUB has been asked, on p. 16, to “acknowledge the Corporation’s unique socio-economic responsibilities”.

Please list these responsibilities and advise how MPI categorizes them between the social and economic responsibilities.

**BW (MPI) 2-24**

Reference: Overview OV.9, Page 22

Preamble: Road Safety - Driver Improvement Control Program

Please provide details of the Driver Improvement Control Program and its expected behavioural changes and how it is expected that this will lead to reduced injury frequency and severity of bodily injuries to cyclists, and in comparison, pedestrians.

**BW (MPI) 2-25**

Reference: Value to Manitoban S.M. 1, Page 23

Preamble: BI initiative added ICD-10 classifications to bodily injury claims information.

Please outline any of MPI’s plans, initiatives, projects or strategies that will use ICD-10 information for research or comparison of traumatic injuries with Manitoba Health, Health Canada or other insurance entities.

**BW (MPI) 2-26**

Reference: Road Safety – SM.3, Page 26

Preamble: MPI stated: "Other patterns are not readily apparent based on the broad dispersion of collisions with vulnerable road users and the relative randomness of these occurrences"

- a) Please indicate how MPI's arrived at the conclusion that "collisions with vulnerable road users are random", listing the specific geographic and statistical analyses that were used to arrive at that conclusion.
- b) Please file the full list of variables or factors that MPI receives for a collision involving a cyclist, indicating the level of granularity and precision of each.
- c) Please indicate which variables MPI loads in the database that it uses to analyze patterns in collisions.
- d) Please indicate to what extent MPI receives information at a sufficient level of detail describing who is involved, extent of injuries, where it occurred, under what conditions – including weather, traffic density, roadway features, speed, driver behaviours, etc. -- in a format that allows multi-variate [sic] analysis of the underlying causes of collisions.
- e) Are there intersection safety cameras on any Winnipeg streets that make video recordings of accidents available to MPI? If not, why not?
- f) If so, does the video evidence collected from intersection safety cameras in cities such as Calgary generally substantiate self-reported collision descriptions?
- g) Are there intersection safety cameras on any Winnipeg streets that could make video recordings of traffic available to MPI for analysis of driver behaviour? If not, why not?

**BW (MPI) 2-27**

Reference: Volume 1, Pre-filed Testimony, Page 26

Preamble: "A 2.4% overall Basic insurance rate increase effective March 1, 2015."  
"A Rate Stabilization Reserve (RSR) Rebuilding Fee of 1.0% on each Basic Autopac premium, effective March 1, 2015.

- a) What impact would a decrease in frequency and a lowering of severity (ICD10) of bodily injuries to cyclists and any other vulnerable road user have on rates and reserve rebuilding fees?
- b) How many fewer severe or fatal bodily injury claims would be required in 2015 to lessen the Basic insurance rate of 0.1% in 2016?
- c) How many fewer severe or fatal bodily injury claims would be required in 2015 to lessen the rebuilding fee by 0.1% in 2016?
- d) Assuming a reduction of fatal injuries of cyclists in 2015 to zero, what effect would that have on Basic insurance rates and the Rebuilding Fee?

**BW (MPI) 2-28**

Reference: Volume 1, Pre-filed Testimony, Power-point, Page 32

Preamble: "MPI's Contribution to Manitoba's Economic Landscape" notes that \$1.8 million was provided to municipalities as grants.

- a) Please confirm which municipalities (and the amounts) received funding from this grant program and advise of the expected benefits to MPI.
- b) Were any of these grant funds intended or used by municipalities for primary prevention of injuries to cyclists or other vulnerable road users?

**BW (MPI) 2-29**

Reference: Value to Manitoban S.M. 1, Page 35

Preamble: MPI states that the Driver Safety Rating System rewards good driving behaviour through premium discounts, while high risk behaviour results in higher premiums.

- a) Please indicate whether provincial charges, without or with crash involvement, for speeding or distracted driving constitute high risk behaviour that will lead to higher premiums.
- b) Please indicate the total number of provincial charges that are possible under the Highway Traffic Act.
- c) Please indicate whether a crash with a cyclist or other vulnerable road users results in the same or higher premiums than a crash with a motor vehicle.

**CAC (MPI) 2015 GRA Information Requests****CAC (MPI) 2-1**

Reference: CAC (MPI) 1-3 Collaborative Estimating Initiative

Preamble: The response in part states "...enabling the automation of payments to repair shops. In the short-term, there is an incremental increase in expenses due to software licensing."

- a) Please elaborate whether the collaborative estimating for electronic supplemental processing and the automation of payments to repair shops, without adjuster review and approval will increase or decrease claims incurred "leakage" over time.
- b) Please discuss the internal controls in place to manage the collaborative estimating process between body shops and MPI.
- c) Please confirm that the incremental increase in expenses due to software licensing is a one-time cost, if not please provide the annual costs.

**CAC (MPI) 2-2**

Reference: CAC (MPI) 1-4 Rate Setting Framework

Preamble: The response in part states "...validate the activity against other systems of record. As a result of these controls, if a system defect is discovered, then the defect resolution process (Unified Production Support Process) is initiated..."

- a) Please elaborate and describe the "other systems of record".
- b) Please list and, in general, describe the number of defects experienced during the last fiscal year by the claims systems.

**CAC (MPI) 2-3**

Reference: CAC (MPI) 1-8 Salvage Vehicle Sales

Please complete the following table:

Vehicle Sales	2012/13			2013/14		
	Amount (\$000)	Units #	Average \$	Amount (\$000)	Units #	Average \$
Vehicles – Winnipeg				\$26,659		
Vehicles – Rural				1,091		
Vehicles – Tender				5,926		
Retained ITC				1,395		
<b>Total</b>				<b>\$35,071</b>		
Expenses				2,730		
<b>Net recovery</b>				<b>\$32,341</b>		

ITC – GST input tax credit

**CAC (MPI) 2-4**

Reference: CAC (MPI) 1-9 Insurance contracts

Preamble: "Complementing this is the use of underlying statistical data. The Corporation uses the data as reported in its claims database in a structured, consistent manner each year."

Please list the liabilities for policy contracts other than insurance contracts included in policy liabilities.

**CAC (MPI) 2-5**

Reference: CAC (MPI) 1-14 Claims Incurred at 12-month

Preamble: "...The Corporation starts by forecasting the accident year ultimate incurred losses and then uses the development assumptions to project 'backwards' the paid and incurred losses from ultimate to 12 months."



For each PIPP coverage, please compare the calculated at 12 month claims incurred based on the development assumptions compared to the actual at 12 month claims incurred for fiscal years 2011/12 to 2013/14. Please explain any significant differences.

**CAC (MPI) 2-6**

Reference: CAC (MPI) 1-15 Negative development for collision

Preamble: The response states: "Negative development is a result of the amounts received from the salvage of vehicles." The response to CAC (MPI) 1-8 (b), in part, states: "Basic claims incurred are forecasted based on historical experience and growth factors as part of the actuarial forecast and the past history of salvage is taken into consideration on a historical average perspective."

If the past history of salvage recoveries is included in the actuarial forecast, why would there be negative development as a result of salvage sales. Please explain.

**CAC (MPI) 2-7**

Reference: CAC (MPI) 1-20 Collision claims incurred at 12 month

Please complete the tables below based on the attachment to CAC (MPI) 1-20:

<b>Collision with Wildlife</b>					
	<b>2011/12A</b>	<b>2012/13A</b>	<b>2013/14A</b>	<b>2014/15P</b>	<b>2015/16P</b>
<b>Frequency (# of covers)</b>					
<b>Severity (\$)</b>					
<b>Incurred (\$000)</b>	\$26,787	\$29,257	\$28,261	\$29,880	\$31,728

A – Actual P – Projected

<b>Collision</b>					
	<b>2011/12A</b>	<b>2012/13A</b>	<b>2013/14A</b>	<b>2014/15P</b>	<b>2015/16P</b>
<b>Frequency (# of covers)</b>					
<b>Severity (\$)</b>					
<b>Incurred (\$000)</b>	\$239,204	\$265,710	\$296,529	\$311,334	\$330,369

<b>Total Collision</b>					
	<b>2011/12A</b>	<b>2012/13A</b>	<b>2013/14A</b>	<b>2014/15P</b>	<b>2015/16P</b>
<b>Frequency (# of covers)</b>					
<b>Severity (\$)</b>					
<b>Incurred (\$000)</b>	\$265,991	\$294,967	\$324,790	\$341,214	\$362,097

**CAC (MPI) 2-8**

Reference: CAC (MPI) 1-20 Collision and Comprehensive Claims

Please provide the following claims data on an accident year basis for years 2011/12, 2012/13 and 2013/14 in the following format for the coverages identified:

<b>Total Collision</b>			
<b>Claims incurred range (\$)</b>	<b>Claims Incurred (\$)</b>	<b>Number of Claims</b>	<b>Average Claims Incurred (\$)</b>
Under \$500			
\$500 to \$750			
\$751 to \$1,000			
\$1,001 to \$2,000			
\$2,001 to \$3,000			
Over \$3,001			

<b>Total Comprehensive</b>			
<b>Claims incurred range (\$)</b>	<b>Claims Incurred (\$)</b>	<b>Number of Claims</b>	<b>Average Claims Incurred (\$)</b>
Under \$500			
\$500 to \$750			
\$751 to \$1,000			
\$1,001 to \$2,000			
\$2,001 to \$3,000			
Over \$3,001			

**CAC (MPI) 2-9**

Reference: CAC (MPI) 1-21 and PUB (MPI) 1-52 (a)

Preamble: "In December 2013 through January 2014 the Corporation was implementing the new Mitchell WorkCentre system."

- a) Please describe the new Mitchell WorkCentre system.
- b) Please provide the annual savings and operating costs of the new Mitchell WorkCentre system.

**CAC (MPI) 2-10**

Reference: CAC (MPI) 1-22 (a) and CAC (MPI) 1-33

Preamble: The response states in part: "The Corporation's forecasts are based on annual data."

Please file the requested information in CAC (MPI) 1-22 (a), on a quarterly basis consistent with the published quarterly financial statements, for fiscal years' 2012/13 and 2013/14.

**CAC (MPI) 2-11**

Reference: CAC (MPI) 1-29 (b) and (c) and Overview page 8

Preamble: Per page 8 – Overview it states: "A comprehensive review of existing injury claims that resulted in a significant increase in loss reserves for prior years; claims. Impact (net of interest rate adjustments) = (\$26) million."

In response to CAC (MPI) 1-29 (c) it states in part: "The Corporation held relatively small amounts of IBNR in these accident years, as it was assumed that all open PIPP claims more than three years old were adequately case reserved."

- a) Please reconcile the \$26 million increase in loss reserves for 2013/14 to the Attachment part of CAC (MPI) 1-29 (b) and explain the differences.
- b) Please identify and/or explain the sources for the budget of \$79,824,873 for 2013 as shown on the Attachment to CAC (MPI) 1-29 (b).
- c) Please elaborate on the steps the Corporation has put in place to ensure PIPP claims will be adequately case reserved, per the corporate PIPP claims reserving guidelines, to avoid or mitigate policy liability valuation errors for future years?

**CAC (MPI) 2-12**

Reference: CAC (MPI) 1-36

Preamble: The response states: "The Other Financial Adjustments represents the Allowance for Doubtful Accounts."

- a) Please describe the source or type of account to which the allowance for doubtful accounts applies.
- b) Please file a copy of the policy for the allowance for doubtful accounts described in a) above.

- c) Please file a historical analysis for the last three fiscal years relating to the allowance for doubtful accounts described in a) above (ie. the receivable amount, the number of accounts, the doubtful allowance taken and the reason for the account to be doubtful).

**CAC (MPI) 2-13**

Reference: CAC (MPI) 1-41 (b)

Preamble: The response, on page 3, in part states: "...as well as building expenses (closure of two buildings in 2012/13 relating to other lines of business increased the amount of building expenses allocated to Basic in 2013/14 by 14.3% or approximately \$1.7 million)."

- a) Please explain where the business activities for the other lines of business (previously handled in the now closed buildings) are currently administered and why would the same portion of operating expenses not be allocated to the non-basic lines of business, if they are still maintained?
- b) Please explain why the operating expenses would not have proportionately decreased as a result of the closure of two buildings and, in fact, potentially reduce the building operating expenses allocated to basic insurance if, in fact, some of the non basic activities are handled in currently basic insurance premises.
- c) As per the attachment, please provide the supporting working papers for the Basic allocation increases year over year of:

- Compensation – Salaries 1.9%
- Special services 8.5%
- Building expenses 14.3%
- Telephone/Telecommunications 6.0%

**CAC (MPI) 2-14**

Reference: CAC (MPI) 1-42

Preamble: The response states: "The amounts are not available at this time".

With respect to the cost containment strategy of a hiring freeze, out-of-province travel and meeting expenses, is there to be an expected financial impact on the 2015/16 basic insurance rates? If yes, has the amount been included in the financial forecasts?

**CAC (MPI) 2-15**

Reference: CAC (MPI) 1-70

Preamble: The response states: "For the 2014/15 budget, the Corporation centralized all postage expenses within the Administrative Services unit. This unit is allocated 100% to operating expenses. This approach remains consistent throughout the forecast period."

- a) For fiscal year 2015/16 the projected postage expense for basic Insurance is \$4,473,000. Please provide an approximate split between operating expenses and claims expenses, if postage was used for claims activity mailings.
- b) If postage expenses are not allocated to claims expenses, please elaborate on what the financial impact would be on the policy liabilities valuation amount relating to ILAE if postage expenses were allocated to claims expenses?
- c) Is the Corporation planning, for the next GRA, to review the expense allocation formulas to correct the postage expense allocation between operating and claims expenses? If not, why not.
- d) Please elaborate on the impact on fleet rebates/surcharges if the allocation to claims expenses is over or under stated (refer to CAC (MPI) 1-106).

**CAC (MPI) 2-16**

Reference: CAC (MPI) 1-71

Preamble: The response states: "Staff impacted by the transition have been redeployed/retrained to support corporate priorities".

Please confirm that with the move/contract to using IBM Data Centre managed service model at a cost of about \$7 million per year, the Corporation has not realized any tangible cost savings.

**CAC (MPI) 2-17**

Reference: CAC (MPI) 1-110

Preamble: Risk based interest rate forecasting methodology ..."stretched the forecasted increase over ten years instead of five"

Please advise if the Corporation is aware of any other company that is using the "risk based interest rate forecasting methodology" as defined by MPI. If yes, please elaborate.

**CAC (MPI) 2-18**

Reference: CAC (MPI) 1-136

Preamble: Volume II, Investment Income, Attachment E, page 3 indicates an unrealized gain in Canadian Equities of \$76.5 million as at Feb 28, 2014. Volume III, Universal Compulsory Automobile Insurance Annual Financial Statement for the fiscal year ended February 28, 2014 on page 2 reports a net loss from operations of (\$69.1) million.

Please confirm that had the unrealized gain in Canadian Equities been realized before Feb 28, 2014 Basic Insurance would have essentially broken even for fiscal year 2013/14.

**CAC (MPI) 2-19**

Reference: CAC (MPI) 1-153 (a)

Preamble: The response to CAC (MPI) 1-153 (a) indicates "See PUB (MPI) 1-98".

The response reference seems to be inaccurate, please provide the correct reference.

**CAC (MPI) 2-20**

Reference: CAC (MPI) 1-153 (b) and CAC (MPI) 1-156; PUB (MPI) 1-4 (a)

Preamble: Accounting for the proposed 1% RSR rebuilding fee

a) Please file a copy of the following:

- (i) PUB Board Order No. 179/01 pages 23 to 27. Please indicate whether MPI believes it's proposal is in accordance with the intent of Order 179/01.
- (ii) From the 2002 MPI GRA please file a copy of tables TI.14 Statement of Retained Earnings and TI.15 Comparison of Operating Results.

**CAC (MPI) 2-21**

Reference: CAC (MPI) 1-155 (d), PUB (MPI) 1-9 (b)

Preamble: Increase basic insurance deductible from \$500 to \$750. The response implies that the Information request was a request to the Legislature of Manitoba to amend the MPIC Act. The information request is simply a financial operating scenario, in light of the huge losses that have been reported for basic insurance in the last two years, to estimate and consider the financial impact to basic insurance by raising the deductible by \$250; exclusive of the financial impact to extension insurance.

If MPI has the capacity and access to the claims data, please prepare and file a pro forma financial statement scenario raising the basic deductible by \$250.



**CAC (MPI) 2-22**

Reference: CAC (MPI) 1-157 (a) (ii)

Preamble: The response states: "Deferrals of policy acquisition expenses were not included in the forecast because this treatment of expenses is not compatible with rate level assessments. Similarly, premium deficiencies were also excluded."

- a) Please explain the current accounting policy and practice of expensing agents' commission and premium taxes over the life of the insurance policy.
- b) Please elaborate on and explain the response relating to "this treatment of expenses is not compatible with rate level assessments".

**CAC (MPI) 2-23**

Reference: CAC (MPI) 1-172 (b) and (c)

- a) The headings on Exhibits 1a to 1f in the 2014 DCAT report indicate that each exhibit is labeled "Statement of Corporate Investment Income". Also, on Exhibit 1f between line 9 and 10 is a heading labeled "Basic Investment Income" which appears to be out of place. Please correct, if necessary, for the record.
- b) Please reconcile and compare the "Adjustment to Base Forecast Net Income" (Restated Base Scenario) on page 5 of the 2014 DCAT report for fiscal years 2014/15 to 2018/19 to Exhibit 1f for the same years as indicated in the response to CAC (MPI) 1-172 (c).

**CAC (MPI) 2-24**

Reference: Volume II 2014 DCAT Report

Preamble: On page 4 it states: "The investigation incorporates assumptions relating to business growth, investments, claims frequency and severity, transfer of capital between lines of business, and other internal and external conditions during the forecast period. My report includes the identification of key risk exposures and the corrective management and regulatory actions that could be taken to mitigate the effect of plausible adverse scenarios."

- a) Please elaborate and quantify the financial impact of the corrective management actions that are or will be taken to mitigate the effect of plausible adverse scenarios before a rate increase would be considered and implemented.
- b) Please confirm that the principal goal of the DCAT process is the identification of possible threats to the financial condition of the insurer and appropriate risk management or corrective actions to address those threats.
- c) Please confirm that the DCAT process informs management of areas requiring strengthened risk mitigation processes to avoid unexpected losses or losses arising from non-recurring events so as to not having to increase rates.

**CAC (MPI) 2-25**

Reference: MPIC Act Subsection 44(1) Excess of assets

Preamble: Subsection 44(1) states: "If the financial statement which, but for this section, the minister would be required to lay before the Legislative Assembly under section 43 shows that the assets of the corporation at the end of the year for which the statement is made exceed its liabilities at the end of that year, the Lieutenant Governor in Council may, by order, direct that the corporation pay to Her Majesty in right of Manitoba forthwith after the statement, amended as provided in subsection (2), has been laid before the Legislative Assembly such portion of the remaining excess as the Lieutenant Governor in Council may determine; but not so as to reduce the remaining balance of the excess of assets over liabilities below 125% of the total of the unearned premiums upon all its outstanding unmatured policies, calculated pro rata for the time expired, together with the amount of outstanding claims and all its other liabilities of every kind."

- a) Please file a copy of the analysis in compliance with subsection 44(1) of the MPIC Act.
- b) Please elaborate as to how subsection 44(1) of the MPIC Act impacts the basic insurance RSR.

**CAC (MPI) 2-26**

Reference: Quarterly Financial Report 1<sup>st</sup> Quarter May 31, 2014 page 4

Preamble: Goal 6 "Manitoba Public Insurance will offer an environment and career opportunities that will encourage employees to strive for excellence. Our people will be treated with respect and fairness and their contributions will be recognized. Why? We value our employees."

The last employee satisfaction results are from Q1-11/12. Please advise when the employee satisfaction "dial" is expected to be updated.

**CAC (MPI) 2-27**

Reference: Quarterly Financial Report 1<sup>st</sup> Quarter May 31, 2014 page 8

Preamble: Deferred policy acquisition costs

Please confirm that the deferred policy acquisition costs of \$24,358,000 relate to commissions and premium tax for non-basic lines of business.

**CAC (MPI) 2-28**

Reference: Quarterly Financial Report 1<sup>st</sup> Quarter May 31, 2014 page 6

Preamble: "Claims costs for the three months ended May 31, 2014 decreased by \$26.6 million compared to last year due primarily to a decrease of \$35.7 million or 36.0% in bodily injury claims incurred, "

- a) Please elaborate on whether the decrease in bodily injury claims incurred of \$35.7 million was a budgeted decrease and included in the 2015 GRA claims forecasting process. If not, what is the impact on the claims projections?
- b) Please identify and elaborate on the source of the \$35.7 million bodily injury claims incurred decrease.

**CAC (MPI) 2-29**

Reference: Quarterly Financial Report 1<sup>st</sup> Quarter May 31, 2014 page 6

Preamble: “Prior year statements have also been restated due to a change in Weighted Customer Call Centre Contact Ratio, the allocation percentage used as part of the cost allocation methodology. It was adjusted to better reflect actual call center activity.”

Please provide a detailed analysis explaining the restatement and change in the Weighted Customer Call Centre Contact Ratio as it relates to basic insurance for the 1<sup>st</sup> Quarter ended May 31, 2014 and for the 2015 GRA forecasts.

**CAC (MPI) 2-30**

Reference: PUB (MPI) 1-2 (c) Board Minute 14-127

Preamble: “To communicate to the Public Utilities Board in its 2015/16 Basic General Rate Application, that if the Public Utilities Board approves a Rate Stabilization Reserve minimum target, based on the DCAT which contains an agreed to safety margin above DCAT results, then the Board of Directors will authorize transferring some Extension and SRE excess retained earnings to increase the Basic Rate Stabilization Reserve and,.. ”

- a) Please elaborate on the reasons MPI management and Board of Directors require PUB acceptance/approval of the DCAT proposed minimum RSR target before transferring excess retained earnings from extension insurance and SRE to Basic RSR.
- b) If excess retained earnings from extension and SRE were not transferred to Basic RSR, please explain if the excess retained earnings from extension insurance and SRE would be returned to the policyholders in the form of premium dividend. If not, please explain how the excess retained earnings would be used.

**CAC (MPI) 2-31**

Reference: PUB (MPI) 1-9 (a)

Preamble: "...the Corporation may consider recommending to the Government to raise the deductible. Changing coverage, and in particular, decreasing coverage, would likely be a last resort. The Corporation would recommend such an approach most reluctantly as it would have a negative impact on the ratepayers and the economy of Manitoba."

Please elaborate and quantify, by way of an example, how raising the basic insurance deductible, by say \$100, would have a negative impact on ratepayers and the economy of Manitoba.

**CAC (MPI) 2-32**

Reference: Response to CAC (MPI) 1-83

- a) Please give the rate for a male driver 25 years of age with 8 years of driving experience and no claims or convictions on his record. Also give the rate for a male driver 50 years of age with 25 years of driving experience and no claims or convictions on his record. Assume a Winnipeg address and rate group 40. Any other rating factors can be assumed as long as they are consistent between the two rate calculations.
- b) Without the use of some predictive variables in the Corporation's algorithm, such as gender, please explain how subsidization does not exist between drivers in Manitoba?

**CAC (MPI) 2-33**

Reference: Response to CAC (MPI) 1-108

Please provide the minutes to the DSR hearing held in 2009. In the alternative please provide an electronic link.

**CAC (MPI) 2-34**

Reference: Page 11 of the Claims Incurred section

Please explain why the simple all year linear trend was used to forecast Claim Count Incurred > \$0 when the Corporation has substantial historical data with which to fit distributions to their loss history to predict these trends, given the volatile nature of Weekly Indemnity claims.

**CAC (MPI) 2-35**

Reference: Response to PUB (MPI) 1-39 (b)

Please provide the detailed derivation of the selected ultimate collision claims greater than \$0 and the selected ultimate collision severities shown in the tables in the response.

**CAC (MPI) 2-36**

Reference: Page 5 of section AI.9

Please show the derivation of the proposed average rate of \$1,003 shown for Major Class Private Passenger in the table.

**CAC (MPI) 2-37**

Reference: Quote on page 3 of Section AI.9

- a) Please provide the amount of investment income from retained earnings that would not be included in the rate indications determined in accordance with accepted actuarial practice in Canada.
- b) Please calculate the rate indications determined in accordance with accepted actuarial practice in Canada if the investment income from retained earnings was divided by the 2015/16 projected units and used as an offset to the indicated required rate.

**CAC (MPI) 2-38**

Reference: Response to CAC (MPI) 1-209, page 6 of Section AI.9

Please confirm that the -5.1% profit provision was simply determined so that the rate indication was the same as with the Corporation's normal fiscal year approach to ratemaking.

**CAC (MPI) 2-39**

Reference: Response to CAC (MPI) 1-210

- a) Please confirm the figures in the following table, taken from Appendix E Sheet 6. If these figures cannot be confirmed please give the correct figures.

<b>Tabular Reserve 116 – Ultimate [1]</b>	<b>Product (116-128 Factor to 200-212 Factor) [2]</b>	<b>Ratio [1]/[2]</b>
0.7564	0.7306	1.0354
0.8388	0.8284	1.0125
0.9449	0.9351	1.0105
0.9705	0.9576	1.0134
1.0288	1.0127	1.0159
0.9595	0.9540	1.0058
1.0523	1.0298	1.0219
0.9996	0.9986	1.0010
1.0648	1.0669	0.9980

- b) Please show the derivation of the tail factor of 1.0356 shown on Appendix E, Page 6 using these figures.

**CAC (MPI) 2-40**

Reference: Appendix F, Page 11

Please show the derivation of the 212 to ultimate factor of 1.0406.

**CAC (MPI) 2-41**

Reference: Response to CAC (MPI) 1-160 (a), (d) (ii)

- a) MPI neglected to provide a substantive answer to CAC 1-160 (a). Please respond substantively to the original request
  
- b) Please give the requested tables from 1-160 d (ii). Since the Corporation has not had direct discussions with the Board on what would be an acceptable increase in rates in response to a severe adverse event this is a valid request.

**CAC (MPI) 2-42**

Reference: Response to CAC (MPI) 1-160 (c)

How does the Corporation classify the interest rate decline scenario as plausible given the Government of Canada's Inflation-control target?

**CAC (MPI) 2-43**

Reference: Response to CAC (MPI) 1-160 (e)

Does the Corporation feel that its approach is realistic given the strong connection between interest rates and inflation?

**CAC (MPI) 2-44**

Reference: Response to CAC (MPI) 1-160 (g)

Would the Corporation agree that the rebound would normally be quicker than the assumptions shown on Page 30 of the DCAT report? If not, please explain the justification for this disagreement.



**CAC (MPI) 2-45**

Reference: Response to CAC 1-29 (c)

Please confirm whether the case reserve review included a review of the tabular reserving assumptions.

**CAC (MPI) 2-46**

Reference: Page 10 of Section AI.9 of the rate application

It appears that the rate indication uses projected claims costs for the 2015/16 and the 2016/17 year.

a) Please confirm this.

b) If confirmed, please explain the reasoning of this given that the rate application is meant to determine adequate rates for the period of March 1, 2015 to February 28, 2016.

**CAC (MPI) 2-47**

Reference: Response to CAC (MPI) 1-206

Please explain why the payments are discounted from the end of the development quarter to the end of rating year 2015/16 when the year for which the rates are to be calculated for is 2015/16 and the claims should therefore be discounted to the midpoint of 2015/16.

**CAC (MPI) 2-48**

Reference: CAC-MPI 1-146 (f), Chart 1.1 in Investment Income page 12

Preamble: Chart 1.1 on page 12 of Investment Income provides 7 years of February interest rate forecasts for GOC 10 year bonds, each of which shows that "interest rates were forecasted to increase" in each of 2008 through 2014. The reply in CAC-MPI 1-146 (f), offers 3 reasons for the change of bandwidth of the duration mismatch from +/-1.5 to +/-2. The third of these reasons was "interest rates were forecasted to increase".

- a) Since interest rates were apparently forecast to increase in each of those periods in Chart 1.1, please quantify the relative interest rate forecast changes that gave significance to the particular forecast interest rate changes that lead to the change in the allowed bandwidth of duration mismatch?
- b) Please identify the specific interest rate forecast most relevant to the 2010 change in duration variance bandwidth, and compare that forecast to the current interest rate forecast indicating the conclusion that should be drawn from the current forecast on the current duration variance bandwidth policy.
- c) Please describe forecast interest rate conditions which would indicate a need to expand the bandwidth of the duration mismatch.
- d) With the continuation of interest rates being “forecasted to increase” what other factors have lead to the apparent reversal of the 2010 policy change to decrease the bandwidth from +/- 2 to now +/- 1.
- e) Assuming that the duration variance bandwidth is one of the measures of MPI’s interest rate risk tolerance, please identify any other important measures of interest rate risk tolerance.
- f) Assuming that the duration variance bandwidth is one of the measures of MPI’s interest rate risk tolerance and observing that the measure is being reduced by 50% [ $(2-1)/2=50\%$ ], please identify causes that have lead to this significant adjustment or factors that counterbalance this change.

**CAC (MPI) 2-49**

Reference: CAC-MPI 1-146 (f). Actuary Report October 31, 2013 AI.7 PDF page 43, Investment Income II.16 Appendix 4 Rebalancing policy

Preamble: The reply CAC-MPI 1-146 (f), offers 3 reasons for the increase of bandwidth of the duration mismatch from +/-1.5 to +/-2 during 2010. The second of these reasons was “elimination of real return bonds and the addition of long bonds”. The Actuary Report October 31, 2013 AI.7 PDF page 43, provides a table which indicates \$187,000 of real return bonds in the portfolio and indicates a nominal yield of 3.75% relative to the Govt

Bonds which represented \$631 million and a nominal yield of 3.22%. Investment Income II.16 Appendix 4 Rebalancing policy indicates a 0% current target for real return bonds but an allowed 5% maximum portfolio weighting for real return bonds.

- a) Since interest rates were apparently forecast to increase in each of those periods, please compare the importance of the second reason offered in CAC-MPI 1-146 (f), the “elimination of real return bonds and the addition of long bonds” to the third reason, that “interest rates were forecasted to increase” that contributed to the change in the allowed bandwidth of duration mismatch?
- b) Please discuss the implications on the asset duration calculation of the substitution of long bonds for real return bonds, and to highlight the effect of differing coupon rates, please contrast December 1 2026 GOC real return bond, with a Canada bond of similar maturity, perhaps the June 2027 maturity: or, the December 1, 2047 real return bond with a bond of similar maturity perhaps the December 2045 maturity.
- c) Are we correct in thinking that as Real Return Bonds have a maximum 5% weighting, and were not expunged as an asset class from the investment policy document, that they may return to the portfolio when thought expedient?
- d) In light of the rapid time line to from spring 2014 to August 2014 to address the fixed in duration change, was there a special reason why the change proportion of real return bonds was not completed until after the 2013 actuarial report?

### **CAC (MPI) 2-50**

Reference: CAC-MPI 1-146 (f). Actuary Report October 31, 2013 AI.7 PDF page 43

Preamble: The reply CAC-MPI 1-146 (f), offers 3 reasons for the increase of bandwidth of the duration mismatch from +/-1.5 to +/-2. The first of these reasons was “the definition of the liabilities was changed from total liabilities to claims liabilities”.

Please quantify the change in dollar and percentage terms for the year in which the change was made.

**CAC (MPI) 2-51**

Reference: CAC-MPI 1-146 (f), Attachment C Investment Income – Duration Matching, page 2, Investment Income –Attachment C page 18 by PWC

Preamble: In CAC-MPI 1-146 (f), a table is supplied that shows Liability Duration varying from 8.9 to 9.4 between February 2010 to May 2014, a change of about 5% [(9.4-8.9)/9.4=5.3%]. Between 2010 and 2014 the allowed bandwidth of the duration mismatch has increased from +/-1.5 to +/-2 and is now being reduced to +/-1, the latter being a 50% drop. In Attachment C, at page 18, the authors observe that “Tolerable ranges were generally within +/-5% -10%” and, that organizations “with shorter term liabilities had higher tolerance for mismatch”. At line 27 of page 2 of the Duration Matching Discussion Paper, MPI indicates that the “duration bandwidth ... was increased from +/- 1.5 years to +/- 2 years which increased the Corporation’s exposure to interest rate risk.” The Saskatchewan Auto Fund had indicated that for all “Liability Cash Flow Buckets with terms over 1 year, asset cash flows are to be matched to within +/- 5%”, [see <http://www.saskratereview.ca/images/docs/sqi-2013/saf-minimum-filing-requirements-srrp-website.pdf> at PDF page 222 of 279].

- a) As the PWC document discussed duration variance bandwidth in percentage terms, and MPI discusses its duration variance bandwidth as +/-2, +/-1.5, or +/-1, is it correct to compare the MPI +/-2 to the liability duration value to calculate a percentage value for comparison, and if not, why not?
- b) Is it correct to conclude that the 10% maximum range indicated by PWC, when considered with reference to the recent MPI liability duration of 9.4, would indicate a range of +/- 0.94 as the maximum limit of the “Tolerable” range?
- c) Are we correct in concluding that the Saskatchewan Auto Fund +/-5% bandwidth, indicates a lower tolerance for interest rate risk than the +/-1 duration variance bandwidth used by MPI, and assuming each organization stayed with its policy bandwidth, exposes Saskatchewan consumers to a lower level of interest rate risk than Manitoba consumers?
- d) To the extent that it is known to MPI what proportion of the PWC sample were within a +/-5% range?

- e) Should we understand that with a liability duration ranging from 8.9 to 9.4 between February 2010 to May 2014, indicates it MPI is an organization with primarily
- (i) “shorter term liabilities” and therefore having a higher tolerance for mismatch,
  - (ii) Longer term liabilities and therefore having a materially lower tolerance for mismatch, or,
  - (iii) Average term liabilities and therefore having a lower tolerance for mismatch.

**CAC (MPI) 2-52**

Reference: CAC-MPI 1-146 (f), Attachment C Investment Income – Duration Matching, page 2, Investment Income –Attachment C page 18 by PWC

Preamble: In CAC-MPI 1-146 (f), a table is supplied that shows the Duration Variance is in excess of the +/-2 bandwidth on 6 occasions between February 2010 to May 2014, one third of the 18 data points in that period, and reached a high of -2.7 in August 2010. In Attachment C, at page 18, the authors observe that “Tolerable ranges were generally within +/-5% -10%” and that organizations “with shorter term liabilities had higher tolerance for mismatch”. At line 27 of page 2 of the Duration Matching Discussion Paper, MPI indicates that the “duration bandwidth ... was increased from +/- 1.5 years to +/- 2 years which increased the Corporation’s exposure to interest rate risk.”

- a) As the August 2012 Variance Duration data point is 2.0, please increase the level of accuracy and confirm whether as at August 2012 the Variance Duration was below or above 2.0?
- b) Please discuss the organization consequences, if any, to the frequent breaches of this +/- 2 years policy limit, between February 2010 and May 2014.
- c) Please assist us in understanding how we should measure the increase in risk of a -2.7 duration variance, in light of the “Tolerable range” being “generally within +/-5% - 10%” identified by PWC. Was MPI’s interest rate risk exposure 170% greater than the 10%” upper limit of the “Tolerable range”?

- d) Please assist us in understanding how we should measure the increase in risk of a -2.7 duration variance, in light of MPI's then maximum policy limit of +/-2. Was MPI's interest rate risk exposure increased on a linear mathematical basis, or on another basis reflecting the probability of interest rate variance outcomes?

**CAC (MPI) 2-53**

Reference: CAC-MPI 1-122, Investment Income II.1.2 page 14, page 27 Investment Income II.3.3.2.1

Preamble: In the reply CAC-MPI 1-122, MPI indicates that it is forecasting a duration gap of -1.1 as at February 2016 and continuing to February 2019. Investment Income II.1.2 page 14 notes the reduction of the duration bandwidth to "+/- 1.0". Page 27 of Investment Income II.3.3.2.1 discusses a reasonable timeline and identifies August 2014 as the date "to increase the fixed income duration so that it is within the revised +/- 1.0 year bandwidth."

- a) In light of August 2014 date for compliance, why is the forecast duration gap for 2016 through 2019 above the Investment Policy limit?
- b) Please identify the financial consequences of this variance in the modeling on investment income.

**CAC (MPI) 2-54**

Reference: CAC-MPI 1-146 (f) and (g), Attachment C Investment Income – Duration Matching, page 2, Investment Income –Attachment C page 18 by PWC

Preamble: In CAC-MPI 1-146 (f), a table is supplied that shows the Fixed Income Assets and Aggregate Claims Liability between February 2010 to May 2014. In CAC-MPI 1-146 (g), we are told that immunization has 3 requirements, equal average duration, adequate value of assets, and, appropriate dispersion of assets. In Attachment C, at page 18, the authors observe that "Tolerable ranges were generally within +/-5% -10%" and that organizations "with shorter term liabilities had higher tolerance for mismatch". At line 27 of page 2 of the

Duration Matching Discussion Paper, MPI indicates that the “duration bandwidth ... was increased from +/- 1.5 years to +/- 2 years which increased the Corporation’s exposure to interest rate risk.”

- a) Would immunization of the claims liability operate to protect MPI and the consumer from interest rate risk, and if not, why not?
- b) In instances when the value of fixed income assets are less than the Aggregate Claims Liability, does this condition increase potential financial consequence of the interest rate risk to which MPI and its consumers are exposed?
- c) Does MPI have any policy with respect to maintaining the market value of its fixed income assets as being at least equal to the value of its claims liabilities, beyond the allocations and policies related to rebalancing found in IPS?
- d) Does MPI have any policy with respect to asset dispersion in relation to the dispersion of its claims liabilities?
- e) CAC observes that the table provided in CAC-MPI 1-146 (f) indicates as at February 2014 the Claims Liabilities exceeded the Fixed Income Assets by approximately 5.3% at a time when the Duration variance was -2.2, and wonders how one would quantify the compounding of the duration variance in excess of the then policy limit and asset liability shortfall?
- f) Please discuss the symmetry of dispersion of assets and the dispersion of liabilities as at February 2014.
- g) CAC observes that the table provided in CAC-MPI 1-146 (f) indicates as at February 2012 the Claims Liabilities exceeded the Fixed Income Assets by approximately 10.1% at a time when the Duration variance was -0.8, and wonders how one would quantify the interest rate risk exposure due to the shortage of approximately \$150,000,000 of fixed income assets and the then duration variance.

h) Please discuss the symmetry of dispersion of assets and the dispersion of liabilities as at February 2012.

**CAC (MPI) 2-55**

Reference: CAC-MPI 1-146 (f), PUB MPI 1-141, CAC MPI 1-93

Preamble: The reply CAC-MPI 1-146 (f), offers 3 reasons for the increase of bandwidth of the duration mismatch from +/-1.5 to +/-2. None of the reasons advanced included the “benefit” of duration mismatch. PUB MPI 1-141 discusses “cash flow matching” and notes that cash flow matching would “largely eliminate the projected net benefit” as a result of “rising interest rates and the duration mismatch”. CAC MPI 1-93 indicates no “material changes to the risk profile, other than ... interest rate forecasting risk ... ”

- a) Please contrast “cash flow matching” as MPI has used that term, and, immunization.
- b) Please identify the actual net benefit enjoyed in 2009/10 and 2013/14, and provide the calculation thereof.
- c) Please indicate how the benefit is affected by shortfalls of interest income investments relative to claims liabilities.
- d) As MPI has noted that bank forecasts tend to overstate actual interest rate increases, is the “projected net benefit”, also overstated?
- e) Please identify where the “projected net benefit” for 2014/15 appears in the application.
- f) Has the reduction in the duration mismatch bandwidth reduced the “projected net benefit”, and if so, please quantify the change?

**CAC (MPI) 2-56**

Reference: PUB-MPI 1-9, PUB-MPI 1-10, PUB MPI 1-22

Preamble: MPI has indicated that there are financial consequences to embracing the banks’ interest rate forecasts used in its application, should they not be achieved. CAC observes that the bank forecasts have now be revised and generally reflect lower actual



rates than those initially forecast for the first 2 quarters of 2014 and a reduction of forecast rates for the balance of 2014 and 2015. For example see

<http://www.bmonesbittburns.com/economics/current/summary.pdf> for the most recent BMO forecast and [http://research.cibcwm.com/economic\\_public/download/rates.pdf](http://research.cibcwm.com/economic_public/download/rates.pdf) for the most recent CIBC forecast. CAC estimates that the changes in forecast GOC 10 year rates, for the 5 banks [excluding Global], for the 6 quarters 3Q 2014 to and including 4Q 2015 would average 40 basis points in reduced interest rates per quarter.

- a) Please update PUB MPI 1-9 to reflect the July August bank interest rate forecasts, and the most recent Global forecast.
- b) Please provide the dates of the bank forecasts employed and the Global forecast data points.

#### **CAC (MPI) 2-57**

Reference: PUB-MPI 1-10. Investment Income Summary of Investment Income page 5, Exhibit 1g Base Scenario Rate Stabilization Reserve DCAT Exhibit 1.

Preamble: MPI has indicated that there are financial consequences to embracing the banks' interest rate forecasts used in its application, should they not be achieved. CAC observes that the bank forecasts have now be revised and generally reflect lower actual rates than those initially forecast for the first 2 quarters of 2014 and a reduction of forecast rates for the balance of 2014 and 2015. For example see <http://www.bmonesbittburns.com/economics/current/summary.pdf> for the most recent BMO forecast and [http://research.cibcwm.com/economic\\_public/download/rates.pdf](http://research.cibcwm.com/economic_public/download/rates.pdf) for the most recent CIBC forecast. CAC estimates that the changes in forecast GOC 10 year rates, for the 5 banks [excluding Global], for the 6 quarters 3Q 2014 to and including 4Q 2015 would average 40 basis points in reduced interest rates per quarter.

Based on earlier forecasts the Summary of Investment Income shows the realized and unrealized gains and losses substantially exceeding the interest income during the forecast period for marketable bonds. CAC anticipates that using the more current forecasts will alter the realized and unrealized gains by a greater degree than the change in interest income for the forecast periods presented.

- a) Please update the table on Summary of Investment Income page 5, to reflect the July August bank interest rate forecasts, and the most recent Global forecast.
- b) As CAC observes that while many of the numbers presented in the tables in Investment Income Summary of Investment Income page 5, and Exhibit 1g Base Scenario Rate Stabilization Reserve DCAT Exhibit 1, are similar, there are more significant variances in the results in 2016/17 and 2017/18, and requests that MPI identify the factors that cause the variance in total interest income, total dividends and other income, and, total gains during the period.

**CAC (MPI) 2-58**

Reference: PUB-MPI 1-10. Page 22 of the DCAT Report dated June 24, 2014

Preamble: MPI has indicated that there are financial consequences to embracing the banks' interest rate forecasts used in its application, should they not be achieved. CAC observes that the bank forecasts have now be revised and generally reflect lower actual rates than those initially forecast for the first 2 quarters of 2014 and a reduction of forecast rates for the balance of 2014 and 2015. For example see <http://www.bmonesbittburns.com/economics/current/summary.pdf> for the most recent BMO forecast and [http://research.cibcwm.com/economic\\_public/download/rates.pdf](http://research.cibcwm.com/economic_public/download/rates.pdf) for the most recent CIBC forecast. CAC estimates that the changes in forecast GOC 10 year rates, for the 5 banks [excluding Global], for the 6 quarters 3Q 2014 to and including 4Q 2015 would average 40 basis points in reduced interest rates per quarter. Page 22 of the DCAT Report dated June 24, 2014 provides a table of interest rates and yields and a table reflecting the Claims Liability Discount rates.

Please update the table of interest rates and yields and a table reflecting the Claims Liability Discount rates to reflect the July August bank interest rate forecasts, and the most recent Global forecast.

**CAC (MPI) 2-59**

Reference: CAC MPI 1-142, Investment Income, Investment Policy Statement, PDF page 12, Investment Income II.4 page 29

Preamble: In CAC MPI 1-142, MPI indicates that the comparison of an income return and total returns “are not comparable”. The Investment Policy Statement, PDF page 12, indicates that the benchmark for the Non-Marketable bonds is the DEX Provincial Total Return Bond Index. The accounting for MUSH bonds notes that they are held at book value and only interest payments flow through the profit and loss statement.

Please indicate why a total return index is the appropriate benchmark for an asset class held at book value.

**CAC (MPI) 2-60**

Reference: CAC (MPI) 1-161, question (c)

Preamble: “In view of the fact that the winter weather of 2013-14 was the worst (coldest) on record in a century, how does the claims loss compare to historical claims losses in terms of the high-loss scenario, i.e. is it a 1-in-100 year for claims losses?”

MPI Response: “Per page 36 of Volume II Claims Incurred, section CI.4, ultimate collision costs in 2013/14 are estimated to be \$31.6 million (or +10.0%) over budget. Per the stochastic modeling results in the DCAT report (pages 74 and 75); the Corporation’s modeling predicts that the 95th percentile of ultimate collision claims in a given year is approximately 10.6% higher than the 50th percentile. Therefore, the Corporation estimates that the observed collision experience would occur about 1 in every 20 years, or 5% of the time.”

Please confirm that this high-claims outcome for 2013/14 lies within the risk tolerance level of 1-in-20 (5%) established for determination of the RSR.

**CAC (MPI) 2-61**

Reference: CAC (MPI) 1-162, question (a)

Preamble: "Please explain how this recommendation provides a role for the RSR to stabilize rates"

MPI Response: "By reacting quickly to an increase in projected claims costs, the Corporation can:

- Limit the impact to the RSR from inadequate rates
- Prevent relatively minor increases in rates from accumulating into more significant rate increases"

- a) Please explain what is assumed about the correlation of claims costs from year to year in this response.
- b) Please explain why minor fluctuations in claims costs from year to year would be expected to accumulate "into more significant rate increases."

**CAC (MPI) 2-62**

Reference: CAC (MPI) 1-167, question (a)

Preamble: "Please explain what is assumed about the recovery (rebound) of equity values in years 3 and 4 in this scenario."

MPI Response: "The base scenario total equity return assumptions are used in years 3 and 4 of this scenario, which is why the report indicates that the results should not be used beyond the first two years. The Chief Actuary must determine the most significant plausible adverse events at all stages of the Corporation's forecast period."

- a) Please confirm that the "base scenario total equity return assumptions" would be lower than the equity returns in years 3 and 4 after a severe equity decline in years 1 and 2.
- b) Please explain the role of evidence in the Chief Actuary's determination of "the most significant plausible adverse events at all stage of the Corporation's forecast."

**CAC (MPI) 2-63**

Reference: CAC (MPI) 1-168, question (a)

Preamble: "Please explain whether the correlations in this table are statistically significantly different from zero."

MPI Response: Correlation between Equity Returns and Interest Rate Movements

	<b>2004 to Present</b>	<b>1956 to Present</b>
1-Year	<b>0.28</b>	<b>-0.12</b>
2-Year	0.09	0.03
3-Year	<b>-0.23</b>	0.04
4-Year	-0.13	0.05

Correlation coefficients in **bold** are statistically significantly different from 0 with an assumed Type 1 error of 0.05.

Please confirm that, in the majority of cases in the above table, the correlation between equity returns and interest rate movements is not statistically significantly different from zero.

**CAC (MPI) 2-64**

Reference: CAC (MPI) 1-171, question (a)

Preamble: **"Re: Cumulative Simulated Ultimate Losses % Deviation from Base Forecast – All Basic Coverages**

Please explain whether the decline in ultimate loss % in this table is indicative of a rebound or mean reversion pattern in claims losses that would at least partially rebuild the RSR in the absence of management action and the imposition of RSR rebuilding surcharges."

MPI Response: "Since the Corporation's claims cost simulation assumes independence in the variability of loss costs between accident years, there is a mean reversion pattern that emerges as more loss years are simulated. A simulation that assumes some positive correlation between loss years would produce a greater range of variability around the best estimate forecast.

The Corporation recognizes that there is variability around the best estimate claims forecast and that this variability can result in favourable or unfavourable outcomes purely by chance."

Please confirm that "a mean reversion pattern that emerges as more loss years are simulated" implies a reversion of retained earnings and the RSR to levels prior to the simulation of the adverse event.