MANITOBA PUBLIC INSURANCE

Round 1 Information Requests

2016 GRA

July 31, 2015

Public Utilities Board

Bike Winnipeg

Consumers' Association of Canada (Manitoba Branch)

Coalition of Manitoba Motorcycles Groups Inc.

Manitoba Public Insurance
2016 GRA Round 1 Interrogatories
July 31, 2015

PUB (MPI) 2016 GRA Information Requests

PUB (MPI) 1-1

Volume:	**I**	**Page No.:**	**OV, Pages 10-43**
Topic:	**Financial Overview**		
Sub Topic:			
Issue:	**Financial Information**		

Question:

Please file the Corporation's Board of Directors, Audit Committee and Investment committee working group meeting minutes that relate to:

a) Asset Liability Management

b) IT Optimization/BTO Projects;

c) RSR or Total Equity Targets/DCAT

d) Cost Containment; and

e) Approval of the 2016 GRA.

Rationale for Question:

To understand Corporate decisions that impact Basic.

PUB (MPI) 1-2

Volume:	I	Page No.:	OV.3, Page 9
Topic:	Basic Financial Statement		
Sub Topic:			
Issue:	Interest Rate Margin for Adverse Deviation		

Preamble: MPI reports in its first quarter report that the interest rate margin for adverse deviation (MFAD) is decreased from 100 basis points to 75 basis points, i.e., a decrease of 25 basis points. This decrease is to reflect the low discount rate used in the valuation of claim liabilities. This adjustment was made to avoid a negative discount rate.

AON in its ALM Study has identified that MPI may want to review the 1% margin and consider basing the margins on a concept similar to the Minimum Capital Test.

Question:

a) Please explain how MPI supported the change from 1% margin for adverse to .75% and the analysis to further reduce the margin to .5%.

b) Please provide MPI's position relative to assessing the level of the margin based on the recommendation made by AON.

PUB (MPI) 1-3

Volume:	I	Page No.:	RSF.3, Pages 17-18
Topic:	Rate Setting Framework		
Sub Topic:	Break-Even Rates		
Issue:	Requested Rate		

Preamble: "Since approximately half of the 2016/17 policies are earned in the 2016/17 fiscal year and the remainder are earned in the 2017/18 fiscal year, the

Corporation takes the average net income of the 2016/17 and 2017/18 *fiscal years* to estimate the average 2016/17 *policy year* net income."

Question:

a) How does this approach of averaging the net income of the 2016/17 and 2017/18 fiscal years account for:

- The rate level adequacy of policy years 2015/16 and 2017/18 being different from that of policy year 2016/17; and

- The influence of the next GRA on fiscal year 2017/18 rate level adequacy.

b) Please provide a five year comparative history showing the average of two successive fiscal years and the related policy year, with respect to:

- Total Earned Revenues; and

- Net Claims Incurred.

Rationale for Question:

To assess the reasonableness of the Corporation's break-even metric.

PUB (MPI) 1-4

Volume:	**I**	**Page No.:**	**813, Page 12**
Topic:	**Claims Management**		
Sub Topic:			
Issue:	**813**		

Question:

Please provide the revenue/cost consequences related to the implementation of the 23 recommendations made by the Auditor General.

Rationale for Question:
To understand how MPI has addressed the recommendations in the Value for Money Audit of PIPP.

PUB (MPI) 1-5

Volume:	**II**	**Page No.:**	**PF.4, Pages 6-7**
Topic:	**Pro Formas**		
Sub Topic:	**2014/15 Financial Results**		
Issue:	**Forecasting**		

Preamble: At the 2015 GRA, MPI provided an updated forecast for 2014/15 based on MPI Exhibit 10 PUB/MPI Pre-Ask 5, which indicated lower forecast interest rates than used in the application. MPI forecasted a net loss of $82.5 million for 2014/15, a deterioration from the forecast presented in the application, due to interest rates being lower than forecast.

MPI stated in its closing arguments:

> "In a rising interest rate environment, the monies gained from the lower cost of claims more than offsets -- offsets the decreases in the bond portfolio. Thus, the financial results will be better. If interest rates decrease, the Corporation's financial results are worse. Unfortunately, currently we are in a falling interest rate environment." [T 2188 2015 GRA]

In this application, MPI has indicated that interest rates had declined from what was forecast, yet the Corporation earned a net income of $2.4 million, not a net loss of $82.5 million or worse.

Question:

a) Please provide an update to PUB/MPI Pre-Ask 5(a) attachment, adding an additional column for actual and updated interest forecast included in this application. Provide a comparison between the Pre-Ask 5(a) with the actual and revised forecast for the current year. Please update OV.3 Pages 7-9 and PF.4 pages 6-7.

b) Please provide an updated comparison of 2015 GRA, adding a column in the middle of the current analysis reflecting PUB/MPI Pre-Ask 5, provide a comparison between the results in that column with actual results, and explain all differences.

c) Please indicate what assumptions were changed in preparing the Pre-Ask 5 forecast run.

Rationale for Question:

Financial Forecast accuracy is important in assessing how future updates should be assessed.

PUB (MPI) 1-6

Volume:	**II**	**Page No.:**	**RM.4.3, Pages 31-32**
Topic:	**Ratemaking**		
Sub Topic:	**Major Classification Required Rates**		
Issue:	**Requested Rate**		

Preamble: For almost all major classes and coverages, the derivation of the Major Classification required rates uses the five most recent years of experience. Three exceptions are noted where the ten most recent years of experience are used to "better smooth out the larger volatility in the data", as follows:

- Motorcycles - Accident Benefits - Other and Income Replacement Indemnity;
- Serious Losses for Accident Benefits - Other (Indexed) and Income Replacement Indemnity; and
- ORVs - Bodily Injury and Property Damage.

Question:
Please provide a comparative analysis of historical experience to justify these exceptions from the Corporation's standard approach of using the five most recent years of experience.

Rationale for Question:
To assess fairness in rating.

PUB (MPI) 1-7

Volume:	II	Page No.:	RM Appendix H, Pages 1-2
Topic:	Ratemaking		
Sub Topic:	Changes in Methodologies and Assumptions		
Issue:	Requested Rate and Forecasting Accuracy		

Question:
Please provide an analysis of the impact of each of the noted changes in methodologies or assumptions summarized in Ratemaking Appendix H.

Rationale for Question:
To provide context for the assessment of the reasonableness of the changes in methodologies or assumptions.

PUB (MPI) 1-8

Volume:	II	Page No.:	RM Appendix G, Page 1
Topic:	Ratemaking		
Sub Topic:	Upgrade Factors and Drift		
Issue:	Requested Rate and Forecasting Accuracy		

Preamble: MFR.40

Question:

a) Please provide a comparative table showing annual drift assumptions by Major Class and overall from this year's GRA (Appendix G, Row [9]) and the corresponding values from last year's GRA, with accompanying commentary on any significant differences.

b) Please discuss the inherent differences between the assumed annual Total Upgrade Factor (ranging between 2.40% and 2.84% from REV.1.2, Page 8) and the assumed annual Overall Drift Factor (4.42%).

PUB (MPI) 1-9

Volume:	II	Page No.:	RM.5.3, Pages 45-46
Topic:	Ratemaking		
Sub Topic:	Special Adjustments		
Issue:	Requested Rate		

Preamble: "The Corporation uses relative ranking rules to ensure that less restrictive rating categories do not have lower rates than more restrictive ones, resulting in special rate adjustments."

In all but one instance, the rate for one rating category is increased to the rate for another rating category.

Question:

What is the justification for moving the rate of one rating category to the rate of the other rating category, rather than moving the rates for both rating categories to a common weighted average rate?

Rationale for Question:

To assess fairness in rating.

PUB (MPI) 1-10

Volume:	**II**	**Page No.:**	**RM.5.2, Page 44**
Topic:	**Ratemaking**		
Sub Topic:	**Exceptions**		
Issue:	**Requested Rate**		

Question:

Please provide specific rationale justifying each of the cited exceptions.

Rationale for Question:

To assess fairness in rating.

PUB (MPI) 1-11

Volume:	**II**	**Page No.:**	**RM, Exhibit V, Pages 1-2**
Topic:	**Ratemaking**		
Sub Topic:	**Pure Premium Trends**		
Issue:	**Forecasting Accuracy**		

Question:

a) Please provide the rationale for the upward bias introduced by rounding selected annual trends up to the nearest 0.25%.

b) Please provide the rationale for the upward bias introduced by imposing a minimum annual trend of 0%.

c) Please discuss what considerations other than the R2 statistic led to the selection of the annual pure premium trends that show a relatively poor R2 statistic.

Rationale for Question:

To assess forecasting accuracy.

PUB (MPI) 1-12

Volume:	**II**	**Page No.:**	**REV. 1, Pages 4-5**
Topic:	**Motor Vehicle Premiums**		
Sub Topic:	**Written Premium Forecast**		
Issue:	**Requested Rate**		

Question:

Please reconcile the formula shown for deriving the Written Premium Forecast (Page 4) with the actual derivation of the written and earned premium forecasts (Page 5).

Rationale for Question:

To assess forecasting accuracy.

PUB (MPI) 1-13

Volume:	**II**	**Page No.:**	**REV.1.1, REV.1.2, Pages 6-11**
Topic:	**Motor Vehicle Premiums**		
Sub Topic:			
Issue:	**Volume and Upgrade Factors**		

Question:

a) Please provide a restated PF.1, PF.2 and PF.3, and R.1 pages 5 and 6 "Motor Vehicle Premiums Written and Earned," to reflect a volume factor of 2.0% throughout the forecast period.

b) Please provide a restated PF.1, PF.2 and PF.3, and R.1 pages 5 and 6 "Motor Vehicle Premiums Written and Earned," to reflect an upgrade factor of 2.95% throughout the forecast period.

Rationale for Question:

To test the forecast sensitivity to changes in the volume and upgrade factor.

PUB (MPI) 1-14

Volume:	**I**	**Page No.:**	**OV.13, Page 35**
Topic:	**Transfer of Retained Earnings into Basic Rate Stabilization Reserve**		
Sub Topic:			
Issue:	**RSR Rebuilding Increases**		

Preamble: In Order 135/14, the Board recommended that in the absence of Board jurisdiction over non-Basic lines of business, the Corporation should develop a transparent strategy for the disposition of excess retained earnings in the Extension and SRE lines of business, to the benefit of Basic ratepayers. The Corporation has since transferred $75.5 million from non-Basic retained earnings to Basic retained earnings, to increase Basie's total equity position to $213.1 million, the minimum considered satisfactory by MPl's Chief Actuary as at February 28, 2015. MPI has advised the Board that unless it is notified otherwise, no transfers will be made to the Basic from Extension and SRE, though the Corporation agrees, when an RSR rebuilding increase is required, to make its intent known to the Board as to whether a transfer of excess retained earnings to the Basic RSR will be made.

Question:

Why does the Corporation refuse to develop a transparent strategy for the disposition of excess retained earnings in the Extension and SRE lines of business, to the benefit of Basic ratepayers, when an RSR rebuilding increase is requested?

Rationale for Question:

Within its Basic rate-setting mandate, the Board must determine the appropriate level of the Basic RSR, including whether ratepayers are required to pay an RSR rebuilding increase.

PUB (MPI) 1-15

Volume:	I	Page No.:	CC.3, Page 9
Topic:	Value Equation		
Sub Topic:			
Issue:	New or enhanced Basic services		

Preamble: The Corporation has stated that the reduction of corporate operating expenses will not be at the expense of delivering on the Corporation's Value Equation, which includes price, coverage, service and access.

Question:

a) Please advise of whether any new or enhanced Basic services are being developed or examined by MPI.

b) If so, please provide the nature of the service or enhancement, and the associated cost/benefit analysis.

Rationale for Question:

The Board must be provided with sufficient information relative to Basic services to enable the Board to consider necessity and prudency of the expenditure.

PUB (MPI) 1-16

Volume:	**I**	**Page No.:**	**PUB.11.4, Page 6**
Topic:	**Compliance with Board Order 135/14**		
Sub Topic:			
Issue:	**Physical Damage Re-Engineering Project Cost Containment Assessment**		

Preamble: In Board Order 135/14, MPI was ordered to file, at this year's GRA, baselines in terms of duration of repair shop contact with MPI and preliminary metrics by which to assess cost containment achievements of the PDR Project. In response to that directive, MPI has advised that cost containment models are in the process of being developed.

Question:

a) Please advise whether these cost containment models are expected to be completed and available to the Board within the context of this GRA.

b) If so, please advise when the models are expected to be filed with the Board.

c) If not, please advise why not.

Rationale for Question:

The Board must be provided with sufficient information relative to cost containment measures within Basic to enable the Board to consider necessity and prudency of Basic expenditures.

PUB (MPI) 1-17

Volume:	I	Page No.:	PUB.11.5, Page 7
Topic:	Compliance with Board Order 135/14		
Sub Topic:			
Issue:	BI^3		

Preamble: In Board Order 135/14, MPI was ordered to file, *inter alia,* at this year's GRA, an update on the claim duration issue including whether pre-BI^3 benchmarks are being achieved. MPI has not responded to that aspect of the Board's directive.

Question:

Please advise whether any pre-BI^3 benchmarks are being achieved since the implementation of BI^3.

Rationale for Question:

The Board must be provided with sufficient information relative to benchmarking measures within Basic to enable the Board to consider necessity and prudency of Basic expenditures.

PUB (MPI) 1-18

Volume:	I	Page No.:	BMK, Page 35
Topic:	Benchmarking		
Sub Topic:			
Issue:	Changes in key trends		

Question:

a) Please explain the reasons for the variability in the operating expense ratio in 2014/15 and 2015/16.

b) Please explain the underlying reason for the change in the operating expense per policy ratio in 2014/15 and in 2015/16.

c) Please explain the underlying reasons for the claims expense per number of claims increasing by 6.54% in 2014/15 and falling by 1.69% in 20·16/17.

Rationale for Question:
To understand changes in trends that impact revenue requirement.

PUB (MPI) 1-19

Volume:	PUB/MPI I-63c 2015 GRA	Page No.:	
Topic:	Benchmarking		
Sub Topic:			
Issue:	Benchmarking Metrics		

Preamble: Last year the Corporation indicated that it was still in the process of developing metrics to assess ongoing productivity in the areas of claims management, physical damage and the Contact Centre.

Question:
Please provide an update on the Contact Centre and physical damage metric development progress.

Rationale for Question:
To understand how MPI is managing costs.

PUB (MPI) 1-20

Volume:	III	Page No.:	AI, Page 12
Topic:	Benchmarking - Operational Efficiency		
Sub Topic:			
Issue:	Operational Efficiency		

Question:

Please provide a table indicating the Corporate performance measure from 2010/11 to 2014/15, actual and forecast, based on the current application for 2015/16 through 2017/18 and comment on the trend in each instance.

Rationale for Question:

To understand the trend from historical Corporate performance benchmarks and to assess the impact on revenue requirement.

PUB (MPI) 1-21

Volume:	**IT Benchmarking**	**Page No.:**	**PUB/MPI 1-79 Attachment (2015 GRA)**
Topic:	**IT Benchmarking**		
Sub Topic:			
Issue:	**IT Expenses**		

Preamble: At last year's GRA, MPI provided detail on the status of recommendations made by Gartner last year and in previous years. Many of the recommendations were under evaluation or in progress.

Question:

Please provide an update on the status of prior recommendations by filing an update to PUB/MPI 1-79 Attachment from last year's GRA

Rationale for Question:

To understand progress made over achievement of IT cost containment.

PUB (MPI) 1-22

Volume:	**IT Benchmarking**	**Page No.:**	**PUB/MPI 1-81 (2015 GRA)**
Topic:	**Expenses**		
Sub Topic:			
Issue:	**IT Expenses**		

Preamble: At last year's GRA, MPI indicated that it had 332 FTEs (Corporate and contractor) working on IT.

Question:

Please provide an update indicating the number of Corporate and contractor staff working on IT, and compare with that which was provided at last year's GRA.

Rationale for Question:

To understand whether cost containment efforts extend to the delivery of IT infrastructure, a major area of costs incurred by the Corporation.

PUB (MPI) 1-23

Volume:	**I and II**	**Page No.:**	**OV.7, Page 19 EXP, Appendix 6**
Topic:	**Cost Containment**		
Sub Topic:			
Issue:	**Staffing Levels**		

Preamble: Manitoba Hydro provided a strategy to contain costs through attrition, including from retirements. MPI has indicated that it would realize a $2.4 million reduction in compensation for 2015/16 from that forecast at the last GRA, due to an analysis of expected staff turnover.

Question:

a) Please explain why the hiring freeze was lifted.

b) Please file a copy of the staff turnover analysis for 2015/16.

c) Please indicate how many positions became vacant in that last three years, and the postings for job positions made and filled externally.

d) Please file a copy of the statistics with respect to retirement over the previous five years, and forecast the level of attrition related to retirements through the outlook period.

e) Please indicate the current number of staff eligible for retirement and the assumption around retirement take-up for the next five years.

Rationale for Question:

To understand the forecast of staffing levels through the test years and outlook.

PUB (MPI) 1-24

Volume:	I and II	Page No.:	CC, Attachment A and B EXP.3.2.4, Page 25
Topic:	Operating Expense		
Sub Topic:			
Issue:	Cost Containment - Staffing Levels		

Preamble: MPI states that the vacancy allowance has resulted in savings of $7.5 million, representing 100 FTEs. This equates to about $75,000 per FTE. MPI has also indicated that it has achieved a staffing reduction of 30 FTEs at a saving of $1.5 million, or $50,000 per FTE.

Question:

a) Please confirm that a full time position is the same as a Full Time Equivalent (FTE). If not, please reconcile.

b) Please provide the supporting calculations around the 2015/16 savings related to the 30 FTE reduction, including the number of positions by classification, the average salary including benefits by department, and the projected savings on this basis.

c) Please provide a continuity schedule of staffing level for total corporate operations by department for 2013/14 and the changes in staffing levels in 2014/15 , 2015/16 and 2016/17

d) Please provide the annualized impact of the 30 FTE savings on 2016/17.

e) Please indicate what average salary and benefits per FTE is used within the Corporation for head count analysis.

f) Please elaborate on what other cost savings measures are being considered by the Corporation.

Rationale for Question:

To test the reasonableness of cost containment savings related to staff reductions.

PUB (MPI) 1-25

Volume:	**II**	**Page No.:**	**EXP, Appendix 13, Page 36**
Topic:	**Expenses**		
Sub Topic:			
Issue:	**Amortization Expense**		

Preamble: In its annual report, MPI has indicated deferred development costs of $29.1 million have not yet been put into use and are currently not being amortized.

Question:

a) Please explain the accounting policy followed for the amortization of deferred development costs.

b) Please provide a breakdown of the deferred development costs by project that is currently not in-service for 2014/15, 2015/16 and 2016/17

c) Please indicate what aspect of the physical damage re-engineering project detailed on Page 4 of the project charter is operational and is use in 2016/17.

d) Please explain the negative $4,111 expenditure for Physical Damage Re-Engineering in 2014/15.

Rationale for Question:

To assess the reasonableness of revenue requirement related to amortization of deferred development costs.

PUB (MPI) 1-26

Volume:	**II**	**Page No.:**	**EXP, Appendix 3, 4 and 11, Pages 10, 11 and 33**
Topic:	**Capital Expenditures**		
Sub Topic:			
Issue:	**Other / Provision**		

Preamble: MPI's forecast of other/provision for deferred capital projects for 2014/15, 2015/16 and 2016/17 is lower by $13 million over what was incurred and forecast to be incurred at this GRA.

Question:

Please provide details of the other/provision deferred projects that were contemplated at the last GRA and explain the major reductions in 2014/15, and now forecast for 2015/16 and 2016/17 reflected in this year's application.

Rationale for Question:

To understand the reasonableness of forecast capital spending.

PUB (MPI) 1-27

Volume:	**II**	**Page No.:**	**EXP, Appendix 13, Page 36**
Topic:	**Expenses**		
Sub Topic:			
Issue:	**Deferred Development Costs**		

Preamble: In its annual report MPI has indicated Deferred development costs of $29.1 million have not yet been put into use and are currently not being amortized.

Question:

Please explain the negative $4,111 expenditure for Physical Damage Re-Engineering in 2014/15

Rationale for Question:

To assess the reasonableness of revenue requirement related deferred development costs.

PUB (MPI) 1-28

Volume:	**I and II**	**Page No.:**	**ITS, Page 22 EXP, Appendix 12, Page 35**
Topic:	**Physical Damage Re-engineering**		
Sub Topic:			
Issue:	**Capital Expenses**		

Preamble: The current overall cost savings estimate has not changed from the project charter presented at the last GRA. The date of the savings now appears to be in 2021/22.

The cost estimate provided last year was $65.5 million and the project was forecast to be completed 2018/19 with major forecast capital spending completed by 2017/18. MPI capital spending forecast now indicates that PDR project spending extends to 2020.

Question:

a) Please explain why the project has been delayed to full implementation beyond 2020.

b) Please reconcile the detail of savings presented this year with the estimated savings presented in the project charter at the last GRA, and compare when savings were to be realized at the last GRA with the current projection.

c) Please provide a separate schedule detailing all of the capital and implementation costs projected to be incurred related to the Physical Damage Re-engineering project and compare with the estimate provided in the project charter and detail provided in PUB/MPI 1-75 (2015 GRA).

d) Please indicate whether there has been any change in the scope of the project; if so, please explain and indicate what if any changes there are to the costs of the project.

e) Please file any update to the project charter.

Rationale for Question:
Capital costs of projects impact MPI operations and revenue requirement.

PUB (MPI) 1-29

Volume:	**II**	**Page No.:**	**EXP.3.2.11.1, Page 32**
Topic:	**ITO Main project**		
Sub Topic:			
Issue:	**Capital Expenses- ITO Project**		

Preamble: At the 2015 GRA, MPI was forecasting to spend $3.1 million in 2014/15 and $1.2 million in 2015/16 on the IT optimization project. MPI indicated in response to PUB/MPI 2-26 last year that these increases were re-forecasted to be incurred in 2014/15 and 2015/16.

In this application, MPI reflects no spending on this project in 2014/15 and 2015/16 and has made the decision to commence the amortization of the project in 2014/15.

Question:
a) When was the ITO project completed?

b) Please explain why the full project spending forecast last year has changed in this year's application. Did the scope of the project change?

c) Why was the status of the project not known at last GRA?

PUB (MPI) 1-30

Volume:	**Volume II 2015 GRA**	**Page No.:**	**EXP., Appendix 3 Table 3.1.1.2**
Topic:	**Expenses**		
Sub Topic:			
Issue:	**Staffing Levels**		

Question:

Please provide the staffing continuity analysis for Basic operations in similar format to Appendix 3 from last year's GRA.

Rationale for Question:

To understand actual and forecast changes in staffing levels, to support assertion that 30 FTE savings have been realized.

PUB (MPI) 1-31

Volume:	**II**	**Page No.:**	**EXP.3.1.1, Page 17**
Topic:	**Expenses**		
Sub Topic:			
Issue:	**Vacancy Allowance**		

Preamble: MPI states that the vacancy allowance is 6%, representing $7.5 million in savings.

Table 3.1.1.3 Corporate Salaries analysis indicates 2016/17 gross salaries at $134.7 million and a vacancy allowance of $6.2 million or 4.6% of total gross salaries.

Question:

a) Please file the determination of the 6% vacancy allowance and demonstrate how the 6% vacancy allowance and $7.5 million savings is incorporated in the Corporate Salary Analysis.

b) Please indicate the actual vacancy percentage attained over the last ten years and the average of the last five and ten year periods, and compare with the targeted vacancy rate.

Rationale for Question:
To understand how the vacancy rate forecast and savings are incorporated in the application.

PUB (MPI) 1-32

Volume:	**II**	**Page No.:**	**EXP.3.1.2, Page 18**
Topic:	**Expenses**		
Sub Topic:			
Issue:	**Salary Expense Analysis**		

Preamble: The salary analysis excludes full payroll costs incurred by MPI.

Question:

a) Please refile table 3.1.1.3 based on total compensation costs, including benefits.

b) Please refile table 3.1.2.1. analysis to include all payroll costs incurred, including benefits.

c) Please refile table 3.1.2.2 analysis to include all payroll costs incurred, including benefits.

d) Please file the results for (a) (b) and (c) based on all corporate operations, including implementation and implementation ongoing.

Rationale for Question:
To understand the changes in total compensation for the Corporation.

PUB (MPI) 1-33

Volume:	**PUB/MPI I-59(f) (2015 GRA)**	**Page No.:**	
Topic:	**Expenses**		
Sub Topic:			
Issue:	**Compound Annual Growth Analysis**		

Question:

a) Please file the compound annual growth for total Corporate expenses by category in a similar format to that provided in PUB/MPI I-59(f) (2015 GRA).

b) Please file a similar analysis to (a) for Basic expenses by Category.

Rationale for Question:

To provide a more relevant format of analysis for cross-examination purposes.

PUB (MPI) 1-34

Volume:	**II**	**Page No.:**	**PF.1, PF.2, PF.3 Pages 3 - 5**
Topic:	**Alternate Rate Scenarios**		
Sub Topic:			
Issue:	**Financial Results**		

Question:

a) Please provide a restated PF.1, PF.2 and PF.3, separating out amounts related to the premium deficiency reserves.

b) Using the presentation from a) above, please provide a restated PF.1, PF.2 and PF.3 with a 1.0% rate change in 2016/17.

c) Using the presentation from a) above, please provide a restated PF.1, PF.2 and PF.3 with a -1.0% rate change in 2016/17.

d) Please provide Pf.1, PF.2 and PF.3 indicating the rate increase required to approximately break even for 2016/17.

Rationale for Question:
To assess the adequacy of revenue requirements at alternate rate levels.

PUB (MPI) 1-35

Volume:	**I**	**Page No.:**	**LP.2.1, pages 8-9**
Topic:	**Road Safety and Loss Prevention**		
Sub Topic:	**Loss Prevention Governance Framework**		
Issue:	**IBM report**		

Preamble: IBM provided conclusions and recommendations to MPI relative to its Loss Prevention Governance Framework in each of the following areas: stage gate process, management, evaluation, and implementation. MPI has advised that these conclusions and recommendations are being reviewed for implementation during the current fiscal year.

Question:

a) Please advise of whether the Corporation accepts or rejects each of the conclusions and recommendations of IBM.

b) For each of the conclusions and recommendations which the Corporation accepts, please advise of when implementation is expected to take place, and any resultant cost consequences.

c) For each of the conclusions and recommendations which the Corporation rejects (if any), please advise of why the Corporation has done so.

Rationale for Question:
Road Safety and Loss Prevention costs are incurred with a view to reducing collisions, and in turn claims costs, and have a dual impact upon Basic Rates; as both expenditures and a potential savings mechanism. The Board must be provided with sufficient information relative to those initiatives to enable the Board to consider necessity and prudency of the expenditures and potential savings.

PUB (MPI) 1-36

Volume:	**I**	**Page No.:**	**LP.2.2, pages 10-11**
Topic:	**Road Safety and Loss Prevention**		
Sub Topic:	**External Stakeholder Committee on Loss Prevention**		
Issue:	**Progress of Committee**		

Preamble: The Terms of Reference of the External Stakeholder Committee on Loss Prevention were established on March 26, 2015, and provide that the committee is permanent, meeting at least quarterly. In addition, MPI will provide the resources required to support the activities of the Committee.

Question:
Please provide a summary of the discussions and progress of the Committee to date.

Rationale for Question:
Road Safety and Loss Prevention costs are incurred with a view to reducing collisions, and in turn claims costs, and have a dual impact upon Basic Rates; as both expenditures and a potential savings mechanism. The Board must be provided with sufficient information relative to those initiatives to enable the Board to consider necessity and prudency of the expenditures and potential savings.

PUB (MPI) 1-37

Volume:	I	Page No.:	LP.4.1, pages 18-22
Topic:	Road Safety and Loss Prevention		
Sub Topic:	High School Driver Education Program & Graduated Driver Licensing Program		
Issue:	Program Effectiveness		

Preamble: MPI has provided its internal reports on the Analysis of Young Drivers, comparing Graduated Driver License (GDL) drivers with pre-GDL young drivers and comparing High School Driver Education (HSDE) participants with non-HSDE participants.

Question:

Please provide the Corporation's position regarding whether the conclusions within either or both of these two internal reports are expected to lead to changes or improvements to the HSDE program or the GDL program, and if so the expected resultant costs and benefits of those changes.

Rationale for Question:

Road Safety and Loss Prevention costs are incurred with a view to reducing collisions, and in turn claims costs, and have a dual impact upon Basic Rates; as both expenditures and a potential savings mechanism. The Board must be provided with sufficient information relative to those initiatives to enable the Board to consider necessity and prudency of the expenditures and potential savings.

PUB (MPI) 1-38

Volume:	I	Page No.:	LP.4.2, Page 25
Topic:	Road Safety and Loss Prevention		
Sub Topic:			
Issue:	HDSE Program Redevelopment		

Preamble: MPI has stated that an implementation plan, implementation roadmap and costing for the multi-year redevelopment are under development.

Question:

Please advise of whether the Corporation has identified an estimate, or estimate range of each of the costs and potential savings of the HDSE program redevelopment, in addition to the two expected benefits referenced at ITS.3.1.9, Page 72.

Rationale for Question:

Road Safety and Loss Prevention costs are incurred with a view to reducing collisions, and in turn claims costs, and have a dual impact upon Basic Rates; as both expenditures and a potential savings mechanism. The Board must be provided with sufficient information relative to those initiatives to enable the Board to consider necessity and prudency of the expenditures and potential savings.

PUB (MPI) 1-39

Volume:	**I**	**Page No.:**	**LP.5**
Topic:	**Road Safety and Loss Prevention**		
Sub Topic:			
Issue:	**Proposed Expense Forecasts**		

Preamble: The Corporation has filed considerable information relative to developments within Loss Prevention and Road Safety, including but not limited to a Loss Prevention Governance Framework, HDSE Program Redevelopment, a three-year Road Safety Operational Plan (2014-2017), and the implementation of a Provincial Road Safety Leadership Committee. Despite these and other developments, the actual and forecast expenses for Loss Prevention and Road Safety remain very similar from 2014/15 through 2019/20, subject to variability arising from an anticipated decrease in immobilizer incentives.

Question:

Please provide the rationale for maintaining the dollar level of the Loss Prevention and Road Safety budget throughout the outlook period, as opposed to increasing the budget.

Rationale for Question:

Road Safety and Loss Prevention costs are incurred with a view to reducing collisions, and in turn claims costs, and have a dual impact upon Basic Rates; as both expenditures and a potential savings mechanism. The Board must be provided with sufficient information relative to those initiatives to enable the Board to consider necessity and prudency of the expenditures and potential savings.

PUB (MPI) 1-40

Volume:	**I and II**	**Page No.:**	**LP, Attachment A, E, Appendix 10**
Topic:	**Ratemaking**		
Sub Topic:			
Issue:	**Requested Rate**		

Preamble: LP, Attachment A provides that 2014/15 actual Road Safety and Loss Prevention expenses were $11,359,000. E, Appendix 10 provides that 2014/15 actual Road Safety and Loss Prevention expenses were $9,346,000.

Question:

a) Please confirm that the apparent difference in actual Road Safety and Loss Prevention expenses of $2,013,000 represents internal, departmental operating costs for the Road Safety and Driver Education Department, which are not included in E, Appendix 10.

b) Please confirm that the same reason applies to the apparent differences in the total expense forecasts for 2015/16 and subsequent years.

Rationale for Question:

Road Safety and Loss Prevention costs are incurred with a view to reducing collisions, and in turn claims costs, and have a dual impact upon Basic Rates; as both expenditures and a potential savings mechanism. The Board must be provided with sufficient information relative to those initiatives to enable the Board to consider necessity and prudency of the expenditures and potential savings.

PUB (MPI) 1-41

Volume:	**II**	**Page No.:**	**CI.5, Page 30**
Topic:	**Claims Incurred**		
Sub Topic:	**Collision**		
Issue:	**Requested Rate and Claims Forecasting**		

Preamble: "2014/15 resulted in the lowest Total Frequency in the last 10 years. The Corporation does not believe that this recent experience is reflective of long-term best estimate assumptions."

Question:

a) Please provide additional background and insight into the unusually low Collision Total Frequency experienced in 2014/15 (e.g., root causes, composition, etc.).

b) By substitution with a more "normal" 2014/15 Collision Total Frequency (in line with recent prior years), please illustrate the estimated impact this year of experience has on the forecasted claims incurred and overall rate requirement.

Rationale for Question:

To assess forecasting accuracy.

PUB (MPI) 1-42

Volume:	**II**	**Page No.:**	**CI.5, Pages 33-36**
Topic:	**Claims Incurred**		
Sub Topic:	**Collision**		
Issue:	**Requested Rate and Claims Forecasting**		

Question:

a) Please document the derivation of the six severity amounts shown for accident years 2013/14 and 2014/15 in the graph on Page 36.

b) Please provide a revised graph from Page 36 showing actual historical severity amounts for accident years 2013/14 and 2014/15.

Rationale for Question:

To assess forecasting accuracy.

PUB (MPI) 1-43

Volume:	**II**	**Page No.:**	**INV.13.2, Page 66**
Topic:	**Interest Rate Forecasting**		
Sub Topic:			
Issue:	**Interest Rate Forecasting Methodology**		

Preamble: With respect to the forecasting of Government of Canada 10 year bond rates, as a result of moving from relying on an average of six forecasts for 2016Q4 (2.70%) to relying on a single forecast for 2017Q1 (3.22%), a meaningful interest rate increase is being forecasted over 2017Q1.

Question:

a) Please provide a restated PF.1, PF.2 and PF.3 based on a revised interest rate forecast in which the Government of Canada 10 year bond rates for 2017Q1 onwards are reduced by 0.37 percentage points (the difference between the Global

Insight 2016Q4 forecast of 3.07% and the selected average 2016Q4 forecast of 2.70%).

b) Please provide the estimated overall required rate change that would correspond to the revised interest rate forecast in a) above.

Rationale for Question:
To assess the reasonableness of the interest rate forecast.

PUB (MPI) 1-44

Volume:	**II**	**Page No.:**	**RM.5.2, Page 44**
Topic:	**Ratemaking**		
Sub Topic:			
Issue:	**Requested Rate**		

Preamble: The forecasted level of investment income jumps from under $13 million in each of 2016/17 and 2017/18, up to over $100 million in each of 2018/19 and 2019/20.

Question:
Please confirm that the most significant contributor to this jump in the level of forecasted investment income (from 2017/18 to 2018/19) is the change from forecasting increasing interest rates in 2017/18 to a flat interest rate forecast starting in 2018/19.

Rationale for Question:
To assess the reasonableness of the forecasted level of investment income.

PUB (MPI) 1-45

Volume:	**II**	**Page No.:**	**INV.13, Page 64**
Topic:	**Investment Income**		
Sub Topic:			
Issue:	**Interest Rate Forecasting**		

Question:

a) Please explain why MPI utilizes only one long term interest rate forecaster.

b) Please explain how the dependence on one long term interest rate forecaster impacts the forecast used for 2016/17 and 2017/18.

c) Please provide a line graph of the forecasts and that used in the analysis.

d) Has the Corporation considered obtaining forecasts from Nesbitt Burns, the Conference Board of Canada, Spatial Economics, to name a few, who provide longer term interest rate forecasts. If not, why not? Explain.

Rationale for Question:

Interest rate forecasting is an important variable for rate setting.

PUB (MPI) 1-46

Volume:	**II**	**Page No.:**	**INV.6, Page 34, Attachment G**
Topic:	**Investment Income**		
Sub Topic:	**Investment Return Assumptions**		
Issue:	**US Equity Returns**		

Preamble: MPI is basing the total equity returns forecast to equal the Canadian Equity Returns. MPI does not forecast realizing any gains on the US Equity Portfolio.

Question:

a) To attempt to understand the reasonableness of using the equity return 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.

d) Please discuss why MPI is forecasting no realized US equity gains in the next five years, given MPI has a $55.6 million in unrealized gains on its US Investments.

Rationale for Question:

Investment income is important for rate-setting.

PUB (MPI) 1-47

Volume:	**II**	**Page No.:**	**INV.9, Page 45**
Topic:	**Investment Income**		
Sub Topic:			
Issue:	**Pension Expense**		

Preamble: It appears that the pension discount rate has been established at 3.6% based on a February 2015 actuarial valuation, and is based on yields on high quality corporate bonds. MPI is forecasting changes to long-term interest rates. It is not clear whether the discount rate is forecasted to change, impacting the forecast pension expense

Question:

Please explain how the changes in interest rate assumptions that are impacting the investment returns in 2015/16, 2016/17 and 2018/19 factor into the determination of a forecast discount rate for the pension liability expense in each year.

Rationale for Question:

To understand the impact of interest rate forecast changes on investment income.

PUB (MPI) 1-48

Volume:	**II**	**Page No.:**	**INV, Attachment A**
Topic:	**Investments**		
Sub Topic:			
Issue:	**Investment Policy Statement**		

Question:

a) For each substantive change made to the investment policy statement, please indicate the reasons for the change in the ISP. With respect to changes tied to the AON recommendations, please reference and explain the recommendation and how the change addresses the recommendation.

b) Please explain why the target asset allocation Section VII in the investment policy statement has not changed given the recommendations made by AON.

Rationale for Question:

To understand how the management of the Investment Portfolio changes, and the impact on returns.

PUB (MPI) 1-49

Volume:	**II**	**Page No.:**	**INV, Attachment B**
Topic:	**Investment Income**		
Sub Topic:	**Asset Liability Management Study**		
Issue:	**AON Recommendations**		

Question:

Please provide a table detailing each of the recommendations made by AON, referencing the page in the AON report, the Corporation's response to the recommendation, and the status of compliance with recommendation.

Rationale for Question:

To understand the extent MPI has adopted recommendations made by AON in the Asset Liability Management Study.

PUB (MPI) 1-50

Volume:	**II**	**Page No.:**	**INV, Attachment B**
Topic:	**Investments**		
Sub Topic:			
Issue:	**Asset Liability Management Study**		

Question:

a) Please provide copies of any analysis or reports provided by AON that have not been filed in this application. Please file pursuant to Board rule 13 or alternatively file a redacted version of the report.

b) Please indicate as to what approaches are used by Saskatchewan Auto Fund and Insurance Corporation of British Columbia.

Rationale for Question:

To understand the approaches used in other jurisdictions for asset liability management.

PUB (MPI) 1-51

Volume:	**II**	**Page No.:**	**INV, Attachment B**
Topic:	**Investment Income**		
Sub Topic:			
Issue:	**Asset Liability Management Study**		

Question:

Please file the engagement letter for the AON assignment as a document to this proceeding.

Rationale for Question:

To understand the process related to the review of the report by the Corporation.

PUB (MPI) 1-52

Volume:	**II**	**Page No.:**	**INV, Attachment B**
Topic:	**Investment Income**		
Sub Topic:			
Issue:	**Asset Liability Management Study**		

Question:

Please indicate when MPI received the Phase I report from AON Hewitt, including date of any presentations.

Rationale for Question:

To understand the process related to the review of the report by the Corporation.

PUB (MPI) 1-53

Volume:	**II**	**Page No.:**	**INV, Attachment B**
Topic:	**Investment Income**		
Sub Topic:			
Issue:	**Asset Liability Management Study**		

Preamble: AON states MPI's current situation (target to break even, premium rate stability objective and small level of reserves allowed) suggest a tighter hedging strategy than duration matching.

Question:

a) Please explain and quantify the rebalancing cost for moving to cash flow matching.

b) Please elaborate on the difficulties in finding longer bond maturities to implement cash flow matching.

c) Please explain how the use of bucketing would address long term liability matching.

Rationale for Question:

To understand the implications for revenue requirement of implementing an alternative interest rate mitigation strategy.

PUB (MPI) 1-54

Volume:	**II**	**Page No.:**	**INV, Attachment C, Page 16**
Topic:	**Investment Income**		
Sub Topic:			
Issue:	**Asset Liability Management Study**		

Question:

a) Please provide in dollar terms the actual / base case representation of the portfolio with the proposed dollar allocations for 2014/15.

b) Please provide the target dollar allocations proposed by AON with the forecast portfolio allocations for 2015/16.

Rationale for Question:

To understand the implementation of ALM recommendations.

PUB (MPI) 1-55

Volume:	**II**	**Page No.:**	**INV, Attachment C, Page 41**
Topic:	**Investment Income**		
Sub Topic:			
Issue:	**Asset Liability Management Study**		

Question:

Please indicate to what extent MPI is implementing 15% to 30% inflation sensitive assets.

Rationale for Question:

To understand changes in the composition of the investment portfolio and the impact on returns.

PUB (MPI) 1-56

Volume:	**II**	**Page No.:**	**INV, Attachment G**
Topic:	**Investment Income**		
Sub Topic:			
Issue:	**Unrealized Gains**		

Question:

a) Please provide an update of the unrealized gains at the end of the first fiscal quarter.

b) Please explain what factors would trigger a review by the Investment Committee Working Group to assess whether gains should be realized in accordance with the Investment Policy Statement.

Rationale for Question:

To understand whether there has been a material change from the $105.6 million in unrealized gains on the Canadian & US portfolio.

PUB (MPI) 1-57

Volume:	**II**	**Page No.:**	**INV Attachment B, Pages 9-13**
Topic:	**Asset Liability Management Study**		
Sub Topic:	**Duration Matching, Cash Flow Matching, and Hybrid Solutions**		
Issue:	**Asset Liability Management Study**		

Preamble: [INV.1.3, Page 13] "The ALM Study has been completed and as a result in this year's rate application the fixed income portfolio is forecasted to be fully matched to the Corporate claims liability duration."

Question:

Please provide detailed rationale for the Corporation's decision to adopt Duration Matching rather than a Hybrid Solution in response to the AON recommendation to "implement a tighter hedging strategy".

Rationale for Question:

To gain a better understanding of the Corporation's interpretation of the ALM Study.

PUB (MPI) 1-58

Volume:	**II**	**Page No.:**	**INV.1.3.2, Page 15**
Topic:	**Asset Liability Management Study**		
Sub Topic:	**Impact of Interest Rates on Basic**		
Issue:	**Asset Liability Management Study**		

Question:

By reference to Table 1.3.2.1, please discuss the reasons for, and implications of, the observation that the Post-ALM forecasts for Gain (Loss) on Marketable Bonds and Gain (Loss) on Claims Liabilities are more interest rate sensitive than the Pre-ALM forecasts when considered separately, but are less interest rate sensitive when considered combined.

Rationale for Question:

To better understand the consequences of the changes made in response to the AON ALM Study.

PUB (MPI) 1-59

Volume:	**III**	**Page No.:**	**AI.7 Report - Feb 2015**
Topic:	**Valuation of Policy Liabilities**		
Sub Topic:			
Issue:	**Claims Forecasting**		

Preamble: MFR.44

Question:

a) For all selected regressions from the February 2015 appointed actuary's report on the valuation of the policy liabilities, please provide a graphical representation, including display of actual data and fitted and selected trend lines, accompanied by the customary regression diagnostics.

b) Please provide a comparison by coverage between the assumed loss trends from the February 2015 appointed actuary's report on the valuation of the policy liabilities vs. the assumed loss trends from the Claims Incurred Forecast (Volume 2 CI), including commentary on any significant differences.

Rationale for Question:
To assess reasonableness of valuation assumptions and consistency with pricing assumptions.

PUB (MPI) 1-60

Volume:	**III**	**Page No.:**	**AI.6**
Topic:	**Financial Statement**		
Sub Topic:			
Issue:	**Audited Corporate Financial Statement**		

Preamble: MPI has filed a condensed version of its Annual Report with the Application.

Question:
Please file a link to the Audited Corporate Financial Statement.

Rationale for Question:
To understand the full financial disclosure related to MPI's 2014/15 financial results.

PUB (MPI) 1-61

Volume:	**III**	**Page No.:**	**AI.9, Page 7**
Topic:	**Actuarial Standards Compliance**		
Sub Topic:	**0% Profit Provision**		
Issue:	**Alternate Rate Indications Based on Accepted Actuarial Practice in Canada**		

Question:

a) Please confirm that the 0% profit provision included in the indicated rates in accordance with accepted actuarial practice in Canada does not recognize the revenue contribution arising from the investment return on the assets supporting Basic Total Equity.

b) Please provide a restated version of the "Major Classification – Required Rate Changes" derivation exhibit which includes a profit provision that recognizes as a premium offset the contribution of the expected investment return on the assets supporting Basic Total Equity.

Rationale for Question:

To assess consistency with the break-even objective.

BW (MPI) 2016 GRA Information Requests

BW (MPI) 1-1

Volume:	**LP 5.1**	**Page No.:**	
Topic:	**Road Safety**		
Sub Topic:	**Statistics**		
Issue:	**Fatal / Serious Injury Trend Analysis**		

Preamble/Rationale: Bike Winnipeg seeks to continue reviewing long term MPI fatality and serious injury data in a disaggregated fashion to better understand the trends relating to fatalities and serious injuries. BW wishes to review the distribution of these fatalities and serious injuries amongst different road users including drivers, passengers and different categories of vulnerable road users including pedestrians, cyclists and motorcyclists.

In the request below, a working definition for the terms current and ultimate is:

Current (Current Fiscal Year Claims Incurred):

> Current fiscal year claims incurred represent the accumulation or sum of all changes in claims dollar activity (paid, reserves, recoveries, IBNR, etc.) for all previous Insurance Accident Years.

Ultimate (Ultimate Claims Incurred):

> Ultimate claims incurred for a year represent the sum of the dollar activity expected/projected/developed to be incurred for a particular Insurance Accident Year (for example what will be the ultimate claims incurred for collision for the Insurance Accident Year for 2012/13).

Question:

Please complete the tables provided in **Attachment A**, with regard to the victim type and classifications for fatalities and serious injuries.

1. MPI Fatalities - Count of Claims
2. MPI Serious Injuries - Count of Claims
3. MPI Fatalities - Cost - Current value - ($000)
4. MPI Serious Injuries - Cost - Current value - ($000)
5. MPI data – Fatalities -Cost per Claim - ($000)
6. MPI data – Serious Injuries - Cost per Claim - ($000)
7. MPI data – Serious Injuries - Ultimate value - ($000)
8. MPI Ratios – Fatalities per Licensed Active Drivers
9. MPI Ratios – Fatalities per Registered Vehicle (Commercial and Non-Commercial)
10. MPI Ratios – Serious Injuries per Licensed Active Drivers
11. MPI Ratios – Serious Injuries per Registered Vehicle (Commercial and Non-Commercial)

BW (MPI) 1-2

Volume:	**LP 5.1**	**Page No.:**	**28 – Table**
Topic:	**Road Safety**		
Sub Topic:	**Statistics**		
Issue:	**Fatal Trend Analysis**		

Preamble/Rationale: Bike Winnipeg seeks to continue reviewing long term MPI injury data in a disaggregated fashion to better understand trends relating to fatalities and serious injuries. BW wishes to review the distribution of fatalities and serious injuries amongst different road users including drivers, passengers and different categories of vulnerable road users including pedestrians, cyclists and motorcyclists, and the distributions in relation to the quantity of licensed drivers and commercial and non-commercial registered vehicles.

Question:

a) Please confirm the data source for the table referenced above.

b) Using the same data source, please complete the tables provided in **Attachment B**, with regard to the victim type for fatalities ("people killed"), licensed drivers, and vehicles registered.

1. Fatalities - Count of Claims
2. Licensed Active Drivers
3. Registered Vehicle (Commercial and Non-Commercial)
4. Fatalities per Licensed Drivers
5. Fatalities per Non-Commercial Registered Vehicles
6. Fatalities per Commercial Registered Vehicles

BW (MPI) 1-3

Volume:	**LP 5.1**	**Page No.:**	
Reference:	**BW (MPI) 2-1 2015 GRA; CAC (MPI) 1-201(a) 2015 GRA**		
Topic:	**Road Safety**		
Sub Topic:	**Statistics**		
Issue:	**Bodily Injury Trend Analysis**		

Preamble/Rationale: Bike Winnipeg seeks to continue reviewing long term MPI bodily injury data in a disaggregated fashion to better understand trends relating to fatalities and serious injuries. BW wishes to review the distribution of bodily injuries amongst different road users including drivers, passengers and different categories of vulnerable road users including pedestrians, cyclists and motorcyclists.

In the request below, a working definition for the terms current and ultimate is:

Current (Current Fiscal Year Claims Incurred):

> Current fiscal year claims incurred represent the accumulation or sum of all changes in claims dollar activity (paid, reserves, recoveries, IBNR, etc.) for all previous Insurance Accident Years.

Ultimate (Ultimate Claims Incurred):

> Ultimate claims incurred for a year represent the sum of the dollar activity expected/projected/developed to be incurred for a particular Insurance Accident Year (for example what will be the ultimate claims incurred for collision for the Insurance Accident Year for 2012/13).

Question:
Please complete the tables provided in **Attachment C**, with regard to the victim type and classifications for fatalities and serious injuries.

1. MPI Bodily Injuries - Count of Claims
2. MPI Bodily Injuries - Cost - Current value - ($000)
3. MPI Bodily Injuries – Cost - Ultimate value - ($000)
4. MPI Bodily Injuries per Licensed Drivers

BW (MPI) 1-4

Volume:	**LP 5.1**	**Page No.:**	**BW (MPI) 1-2 2015 GRA**
Reference:	**BW (MPI) 1-2 2015 GRA**		
Topic:	**Road Safety**		
Sub Topic:	**Statistics**		
Issue:	**Injury Trend Analysis**		

Preamble/Rationale: In accordance with the scope of its intervention, BW requires information regarding MPI's understanding of the future development of road transportation in Manitoba and its inherent risk for collisions and injuries.

Question:

a) Please provide the **total number of registered vehicles** in Manitoba by general class, since 2000.

b) Please complete the tables provided in **Attachment D**, with regard to the victim type and injury by fatality, serious injury and bodily injury.

1. MPI Fatal Injuries - Count of Claims by non-Commercial class
2. MPI Fatal Injuries - Count of Claims by Commercial class
3. MPI Serious Injuries - Count of Claims by non-Commercial class
4. MPI Serious Injuries - Count of Claims by Commercial class
5. MPI Bodily Injuries - Count of Claims by non-Commercial class
6. MPI Bodily Injuries - Count of Claims by Commercial class

BW (MPI) 1-5

Volume:	**LP 5.1, 2013 Traffic Collision Statistics Report**	**Page No.:**	**27-28**
Reference:	**Bike Winnipeg (MPI) 1-10 2014 GRA**		
Topic:	**Road Safety**		
Sub Topic:	**Statistics**		
Issue:	**Contributing Factors - Trend Analysis**		

Preamble/Rationale: In accordance with its scope of intervention, BW is concerned about MPI's collection, analysis and reporting of contributing factors when the victim is a cyclist, and in comparison, other vulnerable road user.

Question:

a) Please refer to **Table 9-7 of the 2013 Traffic Collision Statistics Report, titled "Historical Summary of Contributing Factors Recorded for Victims of Collisions".** Please list the contributing factor and total victims by year, but with clear distinction of the victims by vulnerable road user type or unknown for the latest 6 year period of data.

b) With reference to **Table 9-9 of the 2013 Traffic Collision Statistics Report, titled "Summary of Speed, Distracted, and Impaired as Contributing Factors**". Relying on MPIs data and information on hand, please create this table for involvement of cyclists in collisions, cyclists as fatal or injury victims, and driver involvement ratio for cycling collisions or cyclist victims for the latest 6 year period of data.

c) Please re-create the table in (ii) above for pedestrians.

BW (MPI) 1-6

Volume:		**Page No.:**	
Reference:	**IIHS Status Report, Vol. 50, No. 3, March 31, 2015**		
Topic:	**Road Safety**		
Sub Topic:			
Issue:	**Interventions to Improve Driver Behaviour Towards Cyclists**		

Preamble/Rationale: Bike Winnipeg wishes to review MPI's analysis of incidents involving cyclists and other vulnerable road users and how such information leads to intervention under the Driver Improvement Control Program and the Driver Education Program

Question:

Please file and/or provide the following

a) IIHS Status Report, Vol. 50, No. 3 | March 31, 2015, http://www.iihs.org/iihs/sr/statusreport/article/50/3/3 and

b) The supporting paper, "Cyclist crash scenarios and factors relevant to the design of cyclist detection systems", MacAlister, Anna; Zuby, David S., Insurance Institute for Highway Safety, March 2015

c) Please indicate the details of how MPI has used the above information to develop interventions and driver training that strives to improve driver behaviour towards cyclists.

BW (MPI) 1-7

Volume:		**Page No.:**	
Reference:	**Bike Winnipeg (MPI) 3-4 2014 GRA**		
Topic:	**Contribution to Manitoba's Economy**		
Sub Topic:	**Statistics**		
Issue:	**Tertiary Prevention**		

Preamble/Rationale: Bike Winnipeg seeks to continue reviewing MPI's contribution to Manitoba's tertiary prevention network in comparison to its contribution to property loss.

Bike Winnipeg defines "tertiary prevention" as activities and support aimed at softening the impact of long-term impairment and disability and maximizing potential years or useful life through health and rehabilitation services and income replacement.

Question:

a) With reference to the above IR and response in "d)", please provide "MPI's Contribution to Manitoba's Economic Landscape" for physical damage, injury claims, and Manitoba Health payments (including medical consultant fees) for 2014/15, and back 10 years. Please include a subtotal for injury claims and Manitoba Health payments, and a total column.

b) Please provide a separate table with similar components as above with the percent share of the total amount for each component.

BW (MPI) 1-8

Volume:	**3, Actuarial Reports**	**Page No.:**	**50**
Reference:	**Bike Winnipeg (MPI) 3-12 2014 GRA; BW(MPI) 1-18 2014 GRA**		
Topic:	**Road Safety**		
Sub Topic:	**Budget Allocation**		
Issue:	**Priority Setting**		

Preamble/Rationale: Consistent with the scope of its intervention, Bike Winnipeg seeks to review the optimum size and sufficiency of MPI's road safety budget in light of MPI's process for prioritizing road safety activities within the Loss Prevention portfolio.

Question:

a) With reference to the above IR, please provide the expected ultimate costs saved by one less serious injury in 2016.

b) Please indicate whether or not this expected cost would be different by victim types "Motor Vehicle" and "Vulnerable Road User".

c) Please indicate the corporation's method for addressing income disparity (social gradient) in any cost benefit analyses of programs that concern bodily injury claims.

d) Please outline MPI's definition of property loss categories that would be analogous to "fatal", "serious", or "minor" bodily injuries.

e) Please provide the expected cost saved by one less serious property damage claim (Basic) in 2016.

BW (MPI) 1-9

Volume:	**AI.13 Appendix**	**Page No.:**	**Page 3 of IBM Loss prevention framework & strategy**
Reference:			
Topic:	**Road Safety Societal costs**		
Sub Topic:	**Tabling of MPI societal cost calculations**		
Issue:	**Societal cost calculation**		

Rationale/Preamble: Starting line 38, this report defines loss prevention at MPI as the "*Loss Prevention initiatives undertaken by MPI seek to identify and implement programs to address the primary drivers of claims and claims costs with the intention of reducing the social and financial impact to rate payers*". Further, the MPI filing provides information on MPI's quantitative methodology for relating claims costs to road safety, but not for determining social impacts of collisions involving motor vehicles.

Questions:

a) Is MPI Currently using quantitative methods to determine the social impact of motor vehicle collisions?

b) If so, please table documentation on MPI sponsored projects to quantify social impact

c) If not, how does MPI quantify its success in meeting the social cost aspect of loss prevention?

d) Does MPI believe that the social impacts of collisions are highly correlated to MPI claims costs?

e) Given the extensive evidence of MPI designing and implementing the road safety program to achieve an ROI through claims cost reductions, can MPI produce any quantitative evidence to demonstrate that it is designing and operating its road safety program to minimize social costs of vehicle collisions to Manitobans?

BW (MPI) 1-10

Volume:	**AI.13 Appendix 10**	**Page No.:**	**3-8**
Reference:			
Topic:	**Loss Prevention and Road Safety**		
Sub Topic:	**MPI goals and priorities v. international road safety goals and priorities**		
Issue:	**Additional Information and clarification**		

Preamble/Rationale: In order to ensure that its road safety program is well aligned with the Corporate Strategic Plan, current road safety best practices, evidence-based strategies, Manitoba Public Insurance (MPI) has undertaken an independent assessment its road safety model. The review is also intended to advise on the appropriate size of a road safety budget for MPI and if the current budget is being optimally used. Finally, it presents an opportunity to consider MPI's road safety contribution in light of two new governance elements: the Loss Prevention Strategy and Framework and the Provincial Road Safety Committee.

Questions:

a) Please provide a copy of the engagement letter sent to Sirius Strategic Solutions Ltd. ("Sirius")

b) Please provide the expert's file with respect to the preparation of the Sirius Report.

c) Please provide the names and CVs of all individuals at Sirius who worked on the Report.

d) Please confirm whether MPI intends to call someone from Sirius as a witness in these proceedings.

Attachment A – BW (MPI) 1-1: MPI Claim and Cost Statistics

1. MPI Fatalities - Count of Claims

			Motor Vehicles		Calculated	Vulnerable Road Users			Calculated	Ratio	Ratio
Calendar Year	All Fatalities	Unknown/ errors	Driver	Passenger	Sub-total Vehicle Fatals	Motorcycle & Mopeds Fatalities	Peds	Cyclists	Sub Total VRU Fatals	Motor Vehicles / All Fatals	VRU/All Fatals
2000											
2001											
2002											
2003											
2004											
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2010											
2011											
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2013											
2014											
2015 YTD (June 30)											
Total 2000 - 2015 YTD											

2. MPI Serious Injuries - Count of Claims											
			Motor Vehicles		Calculated	Vulnerable Road Users			Calculated	Ratio	Ratio
Calendar Year	All Serious Injuries	Unknown/ errors	Driver	Passenger	Sub-total Vehicle Serious Injuries	Motorcycle & Mopeds Fatalities	Peds	Cyclists	Sub Total VRU Serious Injuries	Motor Vehicles / All Serious Injuries	VRU/All Serious Injuries
2000											
2001											
2002											
2003											
2004											
2005											
2006											
2007											
2008											
2009											
2010											
2011											
2012											
2013											
2014											
2015 YTD (June 30)											
Total 2000 - 2015 YTD											

3. MPI Fatalities - Current Value ($000)											
			Motor Vehicles		Calculated	Vulnerable Road Users			Calculated	Ratio	Ratio
Calendar Year	All Fatalities	Unknown/ errors	Driver	Passenger	Sub-total Vehicle Fatals	Motorcycle & Mopeds Fatalities	Peds	Cyclists	Sub Total VRU Fatals	Motor Vehicles / All Fatals	VRU/All Fatals
2000											
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2004											
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2007											
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2009											
2010											
2011											
2012											
2013											
2014											
2015 YTD (June 30)											
Total 2000 - 2015 YTD											

4. MPI Serious Injuries - Cost - Current value ($000)

			Motor Vehicles		Calculated	Vulnerable Road Users			Calculated	Ratio	Ratio
Calendar Year	All Serious Injuries	Unknown/ errors	Driver	Passenger	Sub-total Vehicle Serious Injuries	Motorcycle & Mopeds Fatalities	Peds	Cyclists	Sub Total VRU Serious Injuries	Motor Vehicles / All Serious Injuries	VRU/All Serious Injuries
2000											
2001											
2002											
2003											
2004											
2005											
2006											
2007											
2008											
2009											
2010											
2011											
2012											
2013											
2014											
2015 YTD (June 30)											
Total 2000 - 2015 YTD											

5. MPI Fatalities - Cost per Claim

			Motor Vehicles		Calculated	Vulnerable Road Users			Calculated	Ratio	Ratio
Calendar Year	All Serious Injuries	Unknown/ errors	Driver	Passenger	Sub-total Vehicle Fatals	Motorcycle & Mopeds Fatalities	Peds	Cyclists	Sub Total VRU Fatals	Motor Vehicles / All Fatals	VRU/All Fatals
2000											
2001											
2002											
2003											
2004											
2005											
2006											
2007											
2008											
2009											
2010											
2011											
2012											
2013											
2014											
2014 YTD5 (June 30)											
Total 2000 - 2015 YTD											

6. MPI Serious Injuries - Cost per Claim											
			Motor Vehicles		Calculated	Vulnerable Road Users			Calculated	Ratio	Ratio
Calendar Year	All Serious Injuries	Unknown/ errors	Driver	Passenger	Sub-total Vehicle Serious Injuries	Motorcycle & Mopeds Fatalities	Peds	Cyclists	Sub Total VRU Serious Injuries	Motor Vehicles / All Serious Injuries	VRU/All Serious Injuries
2000											
2001											
2002											
2003											
2004											
2005											
2006											
2007											
2008											
2009											
2010											
2011											
2012											
2013											
2014											
2015 YTD (June 30)											
Total 2000 - 2015 YTD											

7. MPI Serious Injuries - Ultimate Value											
			Motor Vehicles		Calculated	Vulnerable Road Users			Calculated	Ratio	Ratio
Calendar Year	All Serious Injuries	Unknown/ errors	Driver	Passenger	Sub-total Vehicle Serious Injuries	Motorcycle & Mopeds Fatalities	Peds	Cyclists	Sub Total VRU Serious Injuries	Motor Vehicles / All Serious Injuries	VRU/All Serious Injuries
2000											
2001											
2002											
2003											
2004											
2005											
2006											
2007											
2008											
2009											
2010											
2011											
2012											
2013											
2014											
2015 YTD (June 30)											
Total 2000 - 2015 YTD											

8. MPI Ratios - Fatalities per 10,000 Licensed Active Drivers												
				Motor Vehicles		Calculated	Vulnerable Road Users			Calculated	Ratio	Ratio
Calendar Year	Number Licensed Active Drivers	All Fatalities	Unknown/errors	Driver	Passenger	Sub-total Vehicle Fatals	Motorcycle & Mopeds Fatalities	Peds	Cyclists	Sub Total VRU Fatals	Motor Vehicles / All Fatals	VRU/ All Fatals
2000												
2001												
2002												
2003												
2004												
2005												
2006												
2007												
2008												
2009												
2010												
2011												
2012												
2013												
2014												
2015 YTD (June 30)												
Total 2000 - 2015 YTD												

9. MPI Ratios - Fatalities per 10,000 Registered Vehicles

			Motor Vehicles		Calculated	Vulnerable Road Users			Calculated	Ratio	Ratio
Calendar Year	All Fatalities	Unknown/ errors	Driver	Passenger	Sub-total Vehicle Fatals	Motorcycle & Mopeds Fatalities	Peds	Cyclists	Sub Total VRU Fatals	Motor Vehicles / All Fatals	VRU/All Fatals
2000											
2001											
2002											
2003											
2004											
2005											
2006											
2007											
2008											
2009											
2010											
2011											
2012											
2013											
2014											
2015 YTD (June 30)											
Total 2000 - 2015 YTD											

10. MPI Ratios - Serious Injuries per 10,000 Licensed Active Drivers

				Motor Vehicles		Calculated	Vulnerable Road Users			Calculated	Ratio	Ratio
Calendar Year	Number Licensed Active Drivers	All Serious Injuries	Unknown/errors	Driver	Passenger	Sub-total Vehicle Serious Injuries	Motorcycle & Mopeds Fatalities	Peds	Cyclists	Sub Total VRU Serious Injuries	Motor Vehicles / All Serious Injuries	VRU/All Serious Injuries
2000												
2001												
2002												
2003												
2004												
2005												
2006												
2007												
2008												
2009												
2010												
2011												
2012												
2013												
2014												
2015 YTD (June 30)												
Total 2000 - 2015 YTD												

11. MPI Ratios - Serious Injuries per 10,000 Registered Vehicles

				Motor Vehicles		Calculated	Vulnerable Road Users			Calculated	Ratio	Ratio
Calendar Year	Registered Vehicles	All Serious Injuries	Unknown/ errors	Driver	Passenger	Sub-total Vehicle Serious Injuries	Motorcycle & Mopeds Fatalities	Peds	Cyclists	Sub Total VRU Serious Injuries	Motor Vehicles / All Serious Injuries	VRU/All Serious Injuries
2000												
2001												
2002												
2003												
2004												
2005												
2006												
2007												
2008												
2009												
2010												
2011												
2012												
2013												
2014												
2015 YTD (June 30)												
Total 2000 - 2015 YTD												

Attachment B – BW (MPI) 1-2: Fatalities, Drivers, Vehicles

1. Fatalities ("People Killed") – Count – by victim type

			Motor Vehicles		Calculated	Vulnerable Road Users			Calculated	Ratio	Ratio
Calendar Year	All Fatalities	Unknown/errors	Driver	Passenger	Sub-total Vehicle Fatals	Motorcycle & Mopeds Fatalities	Peds	Cyclists	Sub Total VRU Fatals	Motor Vehicles / All Fatals	VRU/All Fatals
1993											
1994											
1995											
1996											
1997											
1998											
1999											
2000											
2001											
2002											
2003											
2004											
2005											
2006											
2007											
2008											
2009											
2010											
2011											
2012											
2013											
2014											
2015 YTD (June 30)											
Total											

2. Licensed Drivers - Count	
Calendar Year	Licensed Drivers
1993	
1994	
1995	
1996	
1997	
1998	
1999	
2006	
2007	
2008	
2009	
2010	
2011	
2012	
2013	
2014	
2015 YTD (June 30)	
Total	

3. Registered Vehicles - Count			
Calendar Year	Non-Commercial Registered Vehicles	Commercial Registered Vehicles	Total
1993			
1994			
1995			
1996			
1997			
1998			
1999			
2006			
2007			
2008			
2009			
2010			
2011			
2012			
2013			
2014			
2015 YTD (June 30)			
Total			

4. Fatalities ("people killed") per 10,000 Licensed Active Drivers – by victim type												
				Motor Vehicles		Calculated	Vulnerable Road Users			Calculated		
Calendar Year	Number Licensed Active Drivers	All Fatalities	Unknown/ errors	Driver	Passenger	Sub-total Vehicle Fatals	Motorcycle & Mopeds Fatalities	Peds	Cyclists	Sub Total VRU Fatals		
1993												
1994												
1995												
1996												
1997												
1998												
1999												
2006												
2007												
2008												
2009												
2010												
2011												
2012												
2013												
2014												
2015 YTD (June 30)												

5. Fatalities 9”people killed”) per 10,000 Non-Commercial Registered Vehicles – by victim type

				Motor Vehicles		Calculated	Vulnerable Road Users			Calculated		
Calendar Year	Number of Non-Commercial Registered Vehicles	All Fatalities	Unknown/ errors	Driver	Passenger	Sub-total Vehicle Serious Injuries	Motorcycle & Mopeds Fatalities	Peds	Cyclists	Sub Total VRU Serious Injuries		
1993												
1994												
1995												
1996												
1997												
1998												
1999												
2006												
2007												
2008												
2009												
2010												
2011												
2012												
2013												
2014												
2015 YTD (June 30)												

6. Fatalities 9"people killed") per 10,000 Commercial Registered Vehicles – by victim type												
				Motor Vehicles		Calculated	Vulnerable Road Users			Calculated		
Calendar Year	Number of Commercial Registered Vehicles	All Fatalities	Unknown/ errors	Driver	Passenger	Sub-total Vehicle Serious Injuries	Motorcycle & Mopeds Fatalities	Peds	Cyclists	Sub Total VRU Serious Injuries		
1993												
1994												
1995												
1996												
1997												
1998												
1999												
2006												
2007												
2008												
2009												
2010												
2011												
2012												
2013												
2014												
2015 YTD (June 30)												

Attachment C – BW (MPI) 1-3: Bodily Injury Claims

1. MPI Bodily Injury (BI) Claims - Count of Claims											
			Motor Vehicles		Calculated	Vulnerable Road Users			Calculated	Ratio	Ratio
Calendar Year	All BI Claims	Unknown/errors	Driver	Passenger	Sub-total Vehicle BI Claims	Motorcycle & Mopeds BI Claims	Peds	Cyclists	Sub Total VRU BI Claims	Motor Vehicles / All BI Claims	VRU/All BI Claims
2000											
2001											
2002											
2003											
2004											
2005											
2006											
2007											
2008											
2009											
2010											
2011											
2012											
2013											
2014											
2015YTD (June 30)											
Total 2000 - 2015 YTD											

2. MPI Bodily Injury (BI) Claims - Current Value ($000)											
			Motor Vehicles		Calculated	Vulnerable Road Users			Calculated	Ratio	Ratio
Calendar Year	All BI Claims	Unknown/errors	Driver	Passenger	Sub-total Vehicle BI Claims	Motorcycle & Mopeds BI Claims	Peds	Cyclists	Sub Total VRU BI Claims	Motor Vehicles / All BI Claims	VRU/All BI Claims
2000											
2001											
2002											
2003											
2004											
2005											
2006											
2007											
2008											
2009											
2010											
2011											
2012											
2013											
2014 YTD (June 30)											
Total 2000 - 2014 YTD											

3. MPI Bodily Injury (BI) Claims - Ultimate Value ($000)											
			Motor Vehicles		Calculated	Vulnerable Road Users			Calculated	Ratio	Ratio
Calendar Year	All BI Claims	Unknown/errors	Driver	Passenger	Sub-total Vehicle BI Claims	Motorcycle & Mopeds BI Claims	Peds	Cyclists	Sub Total VRU BI Claims	Motor Vehicles / All BI Claims	VRU/All BI Claims
2000											
2001											
2002											
2003											
2004											
2005											
2006											
2007											
2008											
2009											
2010											
2011											
2012											
2013											
2014 YTD (June 30)											
Total 2000 - 2014 YTD											

4. MPI Ratios - Bodily Injuries per 10,000 Licensed Active Drivers													
				Motor Vehicles		Calculated	Vulnerable Road Users			Calculated	Ratio	Ratio
Calendar Year	Number Licensed Active Drivers	All Fatalities	Unknown/ errors	Driver	Passenger	Sub-total Vehicle Fatals	Motorcycle & Mopeds Fatalities	Peds	Cyclists	Sub Total VRU Fatals	Motor Vehicles / All Fatals	VRU/ All Fatals
2000												
2001												
2002												
2003												
2004												
2005												
2006												
2007												
2008												
2009												
2010												
2011												
2012												
2013												
2014												
2015 YTD (June 30)												
Total 2000 - 2015 YTD												

Attachment D – Injury Claims by Vehicle Class

1. MPI Fatal Injuries - Count of Claims by non-Commercial class

			Motor Vehicles		Calculated	Vulnerable Road Users			Calculated	Ratio	Ratio
Calendar Year	All BI Claims	Unknown/ errors	Driver	Passenger	Sub-total Vehicle BI Claims	Motorcycle & Mopeds BI Claims	Peds	Cyclists	Sub Total VRU BI Claims	Motor Vehicles / All BI Claims	VRU/All BI Claims
2000											
2001											
2002											
2003											
2004											
2005											
2006											
2007											
2008											
2009											
2010											
2011											
2012											
2013											
2014											
2015YTD (June 30)											
Total 2000 - 2015 YTD											

2. MPI Fatal Injuries - Count of Claims by Commercial class

			Motor Vehicles		Calculated	Vulnerable Road Users			Calculated	Ratio	Ratio
Calendar Year	All BI Claims	Unknown/ errors	Driver	Passenger	Sub-total Vehicle BI Claims	Motorcycle & Mopeds BI Claims	Peds	Cyclists	Sub Total VRU BI Claims	Motor Vehicles / All BI Claims	VRU/All BI Claims
2000											
2001											
2002											
2003											
2004											
2005											
2006											
2007											
2008											
2009											
2010											
2011											
2012											
2013											
2014											
2015YTD (June 30)											
Total 2000 - 2015 YTD											

3. MPI Serious Injuries - Count of Claims by non-Commercial class												
			Motor Vehicles		Calculated	Vulnerable Road Users			Calculated	Ratio	Ratio
Calendar Year	All BI Claims	Unknown/ errors	Driver	Passenger	Sub-total Vehicle BI Claims	Motorcycle & Mopeds BI Claims	Peds	Cyclists	Sub Total VRU BI Claims	Motor Vehicles / All BI Claims	VRU/All BI Claims
2000											
2001											
2002											
2003											
2004											
2005											
2006											
2007											
2008											
2009											
2010											
2011											
2012											
2013											
2014											
2015YTD (June 30)											
Total 2000 - 2015 YTD											

4. MPI Serious Injuries - Count of Claims by Commercial class											
			Motor Vehicles		Calculated	Vulnerable Road Users			Calculated	Ratio	Ratio
Calendar Year	All BI Claims	Unknown/ errors	Driver	Passenger	Sub-total Vehicle BI Claims	Motorcycle & Mopeds BI Claims	Peds	Cyclists	Sub Total VRU BI Claims	Motor Vehicles / All BI Claims	VRU/All BI Claims
2000											
2001											
2002											
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2005											
2006											
2007											
2008											
2009											
2010											
2011											
2012											
2013											
2014											
2015YTD (June 30)											
Total 2000 - 2015 YTD											

5.	**MPI Bodily Injuries - Count of Claims by non-Commercial class**											
			Motor Vehicles		Calculated	Vulnerable Road Users			Calculated	Ratio	Ratio
Calendar Year	All BI Claims	Unknown/ errors	Driver	Passenger	Sub-total Vehicle BI Claims	Motorcycle & Mopeds BI Claims	Peds	Cyclists	Sub Total VRU BI Claims	Motor Vehicles / All BI Claims	VRU/All BI Claims
2000											
2001											
2002											
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2007											
2008											
2009											
2010											
2011											
2012											
2013											
2014											
2015YTD (June 30)											
Total 2000 - 2015 YTD											

6.	**MPI Bodily Injuries - Count of Claims by Commercial class**											
			Motor Vehicles		Calculated	Vulnerable Road Users			Calculated	Ratio	Ratio
Calendar Year	All BI Claims	Unknown/ errors	Driver	Passenger	Sub-total Vehicle BI Claims	Motorcycle & Mopeds BI Claims	Peds	Cyclists	Sub Total VRU BI Claims	Motor Vehicles / All BI Claims	VRU/All BI Claims
2000											
2001											
2002											
2003											
2004											
2005											
2006											
2007											
2008											
2009											
2010											
2011											
2012											
2013											
2014											
2015YTD (June 30)											
Total 2000 - 2015 YTD											

CAC (MPI) 2016 GRA Information Requests

CAC (MPI) 1-1

Volume:	**3, Actuarial Reports**	**Page No.:**	**22, Oct report 4, Feb report**
Topic:	**Actuarial Reports**		
Sub Topic:			
Issue:	**Ensuring the reasonableness of the Actuarial Reports**		

Preamble: The October 31, 2014 Actuarial Report, page 22, states "Incremental loss development factors after 116 months were revised to reflect the recent experience if there were at least five observed factors." The February 28, 2014 Actuarial Report, page 4, states "All comments, caveats, limitations and explanations contained in our October 31, 2014 report continue to apply".

Question:

a) Appendix E, page 6 of the February 28, 2014 report shows the 120-Ultimate factor as 1.0091, the same factor as the Tab Rsv 120-Ult factor. This implies that the loss development factors for 120-132, 132-144. 144-156, 156-168 and 168-180 are not considered, despite having at least five observed factors. The 216-Ultimate factor is simply chosen to ensure that the 120-Ultimate equals the 1.0091. Please explain this apparent contradiction.

b) Please identify the steps, if any, the corporation has made to find an alternative source of information to calculate the tail factor for the Weekly Indemnity coverage instead of relying on a judgmental factor from 120 months to ultimate.

c) Please explain whether an investigation into the mortality assumptions underlying the calculation of the tabular reserves has been undertaken. If not, why not, given how old the tables used are?

d) Please confirm that reducing the Weekly Indemnity tail factor at 216-Ultimate by 2% for both Incurred and Paid, keeping all other assumptions including the choice of methodology the same, would bring the Selected IBNR shown on Exhibit 4, Page 5 of the February 28, 2014 Actuarial Report by $12.7 million.

Rationale for Question:
To understand the degree to which judgment rather than data plays a role in the analysis and to test whether the mortality tables relied upon require updating. This goes to the reasonableness of the forecasts.

CAC (MPI) 1-2

Volume:	**3, Actuarial Reports**	**Page No.:**	**50**
Topic:	**Actuarial Reports**		
Sub Topic:			
Issue:	**Ensuring the reasonableness of the Actuarial Reports**		

Preamble: As per the February 28, 2014 Actuarial Report a bulk IBNR of $16.5 million was added to the valuation to reflect the delay in processing vehicle damage claims. There is no mention of this bulk IBNR in the October 31, 2014 or the February 28, 2015 Actuarial reports. The October 31, 2014 Actuarial report, page 21 states that the "loss development factors (both incurred and paid) were revised to reflect recent experience. The impact of these revisions is an increase in undiscounted IBNR of $1.1 million." However, when comparing Exhibit 4, Sheet 3 of the February 28, 2015 to the February 28, 2014 exhibit it looks like Collision IBNR went down significantly.

Question:
Please provide an explanation for the transition of the bulk IBNR set up last year to the current state of Collision IBNR.

Rationale for Question:
To test the reliability of forecasts. To understand current trend relating to collision.

CAC (MPI) 1-3

Volume:	**3, AI.9**	**Page No.:**	**4**
Topic:	**Profit Adjustment**		
Sub Topic:			
Issue:	**Potential Error in wording**		

Preamble: Page 4 of Section AI.9 states that "After making the negative profit adjustment to achieve the Corporation's fiscal year break-even net income objective, there are, in my opinion, material [emphasis added] differences in the indicated rates between accepted actuarial practice in Canada and the Corporation's existing methodology."

Question:
Please confirm that this was not intended to be immaterial rather than material.

Rationale for Question:
Clarification of whether [*sic*] the corporation's view is that there are material differences in indicated rates between its existing methodology and accepted actuarial practice.

CAC (MPI) 1-4

Volume:	**3, AI.9**	**Page No.:**	**7**
Topic:	**Rate Indications Determined in Accordance with Accepted Actuarial Practice in Canada**		
Sub Topic:			
Issue:	**Investment Income Offset**		

Preamble: As per the Canadian Actuarial Standards of Practice the claims costs and expense costs are discounted when calculating a required rate and therefore include the investment income on claims liabilities in a rate indication. For a monopoly, like MPI, the investment income missing from the rate indication is that on the assets in excess of those backing the claims liabilities. The required rate has to be offset by this amount.

Question:

The projected investment income for 2016/17 is projected to be 12,809,000 as per page 4, Proj Financials Section of Volume 1. With the projected 2016/17 units of 1,153,000 that is an offset of $11.11 per vehicle.

a) Please confirm this calculation. If it is not correct please give the correct calculation.

b) Please calculate the required rate change shown on page 7 of AI.9 with this offset.

Rationale for Question:

MPI should be calculating their rate indication with accepted actuarial practice in Canada. This could be done very easily with the addition of an investment income offset for the investments in excess of those backing the claims liabilities. The investment income on the investments backing the claims liabilities is taken into account with the discounting of the claims for ratemaking.

CAC (MPI) 1-5

Volume:	**3, AI.9**	**Page No.:**	**7**
Topic:	**Rate Indications Determined in Accordance with Accepted Actuarial Practice in Canada**		
Sub Topic:			
Issue:	**Forecasting Basis**		

Preamble: The ultimate losses for prior accident years are projected and signed off by the Appointed Actuary in the February 28, 2015 Actuarial Report.

Question:

Please explain why the Corporation does not use these ultimate losses as a starting point and project them forward to the rating year in question. Trend could be determined on an ultimate basis in much the same manner as it is today by coverage.

Rationale for Question:

MPI should be calculating their rate indication with accepted actuarial practice in Canada. This could be done using the Actuarial Report's historical ultimate losses and projecting forward to the rating year in question.

CAC (MPI) 1-6

Volume:	**2, Claims Incurred**	**Page No.:**	**11**
Topic:	**Weekly Indemnity Ultimate Losses**		
Sub Topic:			
Issue:	**Do not match to the Appointed Actuary's report**		

Preamble: The ultimates should flow through from the AA report to the Claims Forecast and they do not seem to.

Question:

The first table on page 11 of the Claims Incurred section shows figures for Ultimate losses from 2005/06 to 2014/15. These figures do not match the ultimates shown on page 36 of the February 28, 2015 Actuarial report. Please explain why.

Rationale for Question:

To ensure the accuracy of the claims forecast.

CAC (MPI) 1-7

Volume:	**2, Claims Incurred**	**Page No.:**	**11**
Topic:	**Weekly Indemnity Frequency Forecast**		
Sub Topic:			
Issue:	**Forecast seems high**		

Preamble: There is an apparent inconsistency in verbiage to forecast.

Question:

On page 11 of the Claims Incurred section it states "Claim counts were forecasted based on the all year trend line as shown in the above table." The table shows the all year trend as 1705 but the 2015/16 forecast shows 1804. Since the trend line brings the 1705 to the next year which would be 2015/16 why is the forecast not equal to that?

Rationale for Question:

To ensure the accuracy of the claims forecast.

CAC (MPI) 1-8

Volume:	**2, Claims Incurred**	**Page No.:**	**13**
Topic:	**WII Fiscal Year Forecast**		
Sub Topic:			
Issue:	**Reconciling Exhibit 1 to the table on page 13**		

Preamble: The Claim Incurred section should be easily reconcilable to the Exhibits in this section and they are not.

Question:

Please give the source in Exhibit 1 of the figures in the table on page 13 of the Claims Incurred section, page 13.

Rationale for Question:

Reviewers need to see the flow of data into the projections.

CAC (MPI) 1-9

Volume:	**2, Claims Incurred**	**Page No.:**	**15**
Topic:	**ABO Indexed Frequency Forecast**		
Sub Topic:			
Issue:	**Forecast seems high**		

Preamble: There is an apparent inconsistency in verbiage to forecast. On page 15 of the Claims Incurred section it states "Claim counts were forecasted based on the all year trend line as shown in the above table." The table shows the all year trend as 12018 but the 2015/16 forecast shows 12063.

Question:

Since the trend line brings the 1201810 to the next year which would be 2015/16 why is the forecast not equal to that?

Rationale for Question:

To ensure the accuracy of the claims forecast.

CAC (MPI) 1-10

Volume:	**2, Claims Incurred**	**Page No.:**	**15**
Topic:	**ABO Indexed Severity Forecast**		
Sub Topic:			
Issue:	**Forecast seems inconsistent with verbiage**		

Preamble: There is an apparent inconsistency in verbiage to forecast. On page 15 of the Claims Incurred section it states "The 2015/16 severity is based on the five-year average of the ultimate severity with one year of severity growth applied." The severity growth is shown on page 16 as 1.17%. The calculation should be

(4889+5684+5556+5611+5637)/5 x 1.0117 = 5539. The table shows the forecast for 2015/16 severity as 5505.

Question:

Please reconcile the calculation to the forecast.

Rationale for Question:

To ensure the accuracy of the claims forecast.

CAC (MPI) 1-11

Volume:	**2, Claims Incurred**	**Page No.:**	**19**
Topic:	**ABO Non Indexed Frequency Forecast**		
Sub Topic:			
Issue:	**Inconsistency in Verbiage with the table values**		

Preamble: On page 19 of the Claims Incurred section it states "Claim Counts are forecasted based on the 5-year average and remain at that level throughout the forecast period." The average of the claim counts for years 2010/11 to 2014/15 is 1437.

Question:

Please give the derivation of the 2015/16 forecasted claim counts of 1474.

Rationale for Question:

To ensure the accuracy of the claims forecast.

CAC (MPI) 1-12

Volume:	**2, Claims Incurred**	**Page No.:**	**19**
Topic:	**ABO Non Indexed Severity Forecast**		
Sub Topic:			
Issue:	**Forecast seems inconsistent with verbiage**		

Preamble: There is an apparent inconsistency in verbiage to forecast. On page 19 of the Claims Incurred section it states "The 2015/16 severity is based on the five-year average of the ultimate severity with one year of severity growth applied." The severity growth is shown on page 20 as 1.15%. The calculation should be (21386+20130+20114+19171+20678)/5 x 1.0115 = 20259. The table shows the forecast for 2015/16 severity as 20849.

Question:

Please reconcile the calculation to the forecast.

Rationale for Question:

To ensure the accuracy of the claims forecast.

CAC (MPI) 1-13

Volume:	**2 Ratemaking**	**Page No.:**	**20**
Topic:	**Reconciliation of Ratemaking Incurred Claims to those shown in the Claims Incurred Forecast**		
Sub Topic:			
Issue:	**Reconciliation of Ratemaking Incurred Claims to those shown in the Claims Incurred Forecast**		

Question:

Please split the table shown on page 20 of the Ratemaking section into two tables showing the Incurred Losses and Internal Loss Adjustment Expenses ensuring that the Incurred Losses can reconcile to the table shown on page 39 of the Claims Incurred section.

Rationale for Question:

To ensure the accuracy of the rate indication calculation.

CAC (MPI) 1-14

Volume:	**2 Claims Incurred**	**Page No.:**	**37, 38**
Topic:	**Collision Forecast**		
Sub Topic:			
Issue:	**Reconciling the Calculations on the table on page 38**		

Preamble: On page 37 of the Claims Forecast Section Collision Ultimate Severity Growth Forecasts are given for 2015/16 of 3.38% and for 2016/17 of 4.55%. On the table on page 38 the Severity is given as 3155 for 2014/15. When the 3.38% and 4.55% growth rates are applied this should give severity forecasts of 3261 for 2015/16 and 3410 for 2016/17.

Question:

Please reconcile these figures to the forecasts shown on page 38 of 3294 and 3444.

Rationale for Question:

To ensure the accuracy of the claims forecast.

CAC (MPI) 1-15

Volume:	**2 Claims Incurred**	**Page No.:**	**38**
Topic:	**Collision Forecast**		
Sub Topic:			
Issue:	**Understanding the Calculations on the table on page 38**		

Question:

a) Please confirm the figures in the table below are accurate with regards to the Collision forecast on page 38 of the Claims Incurred forecast.

Collision Ultimate Forecast				
Accident Year	Claim Frequency per HTA Unit (1)	Severity Adjusted for PST (2)	HTA (3)	Calculated Ultimate (1) x (2) x (3)
2005/06	0.121	2,358	713,135	203,470
2006/07	0.132	2,366	721,360	225,289
2007/08	0.132	2,400	735,225	232,919
2008/09	0.132	2,434	751,937	241,588
2009/10	0.127	2,511	763,251	243,398
2010/11	0.137	2,553	774,765	270,983
2011/12	0.128	2,702	791,384	273,705
2012/13	0.135	2,825	811,247	309,389
2013/14	0.138	3,002	822,677	340,815
2014/15	0.119	3,155	834,238	313,210
% Change 2015/16		3.38%	1.41%	
% Change 2016/17		4.55%	1.75%	
2015/16	0.132	3,262	846,001	364,234
2016/17	0.132	3,410	860,806	387,471

b) Please give the calculation of the Ultimates shown on the table on page 38 noting why they are different from the calculation of the ultimates in the table given above.

Rationale for Question:

To ensure the accuracy of the claims forecast.

CAC (MPI) 1-16

Volume:	III, Annual Reports, AI.6, Part 2	Page No.:	14
Topic:	Physical Damage Repairs		
Sub Topic:	Complex materials used to build vehicles		
Issue:	Increasing vehicle repair costs and/or repair costs avoidance		

Preamble: "The Inter-Industry Conference on Auto Collision Repair (I-CAR), an international non-profit organization dedicated to training the collision repair industry, estimates that by 2016 the industry will see over 240 redesigns and new models from vehicle manufacturers. In addition to the use of more complex materials, manufacturers are also responding to consumer demand for more collision-avoidance technologies and other electronics."

The Manitoba repair industry is investing in re-tooling, training and new equipment to continue to repair these redesigned vehicles safely and reliably.

Question:

a) In preparing the claims incurred forecasts for the 2016 GRA; can the Corporation provide an estimate of the number of vehicle units, included in the forecasts, that I-CAR is referring to as having been redesigned with more complex materials such as boron steel, aluminum and carbon fibre [*sic*]?

b) Please provide an estimate of the additional claims incurred costs and/or claims incurred savings included in the claims incurred forecast for the forecasting period relating to the redesigned vehicles included in the claims incurred forecasts, if any?

c) Please provided the estimated costs included in the claims incurred forecasts relating to MPI's contribution/subsidy to the Manitoba repair industry for their investment in re-tooling, training and new equipment for repairing redesigned vehicles, if any?

Rationale for Question:

Cost and/or savings impact on claims incurred forecasts relating to new vehicle design and technology.

CAC (MPI) 1-17

Volume:	**III, Annual Reports, AI.6, Part 2**	**Page No.:**	**16**
Topic:	**Bodily Injury Claims**		
Sub Topic:	**Care residence**		
Issue:	**Impact on PIPP claims incurred forecasts**		

Preamble: "In 2014, work began on a shared care residence in Brandon, slated to open in 2015, which will provide long-term permanent housing for traumatically brain-injured claimants."

Question:

Please elaborate on the concept of shared care residence housing. Is MPI responsible for building and managing the building or is there a third party involved? Please provide the detailed cost/benefit business plan for greater clarity.

Rationale for Question:

Impact on PIPP claims incurred forecasts.

CAC (MPI) 1-18

Volume:	**I, BI^3**	**Page No.:**	**10**
Topic:	**BI^3**		
Sub Topic:	**BI^3 Performance**		
Issue:	**Success of BI^3**		

Preamble: In Board Order 135/14 pages 28 to 29 it states "CAC submitted that the BI^3 Project has not led to any success in controlling claims costs, increased consistency in claims handling between case managers or reductions in claims leakage as promised by MPI, and that in fact there has been deterioration in the Corporation's performance compared to pre-BI^3 benchmarks. CAC pointed to the following issues encountered relative to the BI3 Project, which issues it states affect PIPP reserving estimates and therefore cast doubt upon the credibility and reliability of some of the ultimate PIPP forecasts:

- Double reserving resulting in overstatement of certain reserves (addressed in November 2012);

- Lag in complying with case reserving guidelines gave rise to gaps in reserving that were more extensive than expected;

- Lag in complying with case reserving guidelines was identified by actuaries not claims managers through monthly reporting; and

- Deterioration in duration performance compared to pre-BI3 benchmarks.

CAC stated that there is still opportunity for improvement pursuant to the BI^3 Project, but that in its view, MPI has not established that the BI^3 Project has demonstrated its ability to control claims costs, or that there has been value received for the funds expended on the BI3 Project. CAC asked that MPI be directed to provide an update at the next GRA relative to the duration issue and management of PIPP claims that includes whether pre-BI^3 benchmarks are being achieved, when higher post-BI^3 benchmarks will be implemented and what those benchmarks will be."

Question:

a) Please confirm that there are no PIPP data anomalies in the 2016 GRA PIPP claims incurred actuals and forecasts.

b) MPI indicates that PIPP BI^3 benchmarks cannot be set for another 2 years (7 years of BI^3 data). Please explain how MPI is able to develop and forecast PIPP BI^3 claims incurred for current and future years but is unable to develop benchmarks from the same data for the efficient management of post BI^3 PIPP claims.

c) Please discuss measurable dollar benefits MPI has achieved to-date (last 5 years) operating the BI^3 system and processes.

d) Please provide an estimate of the annual operating expenses relating to operating the BI^3 system

e) Please provide an update of the Corporations performance against pre BI^3 benchmarks.

Rationale for Question:
To ensure that PIPP claims incurred forecasts are reasonable and BI3 operating costs are reasonable relative to the benefits achieved.

CAC (MPI) 1-19

Volume:	**II**	**Page No.:**	**1 and 5**
Topic:	**Claims Incurred**		
Sub Topic:	**Claims Forecasting Committee**		
Issue:	**Are the claims incurred forecasts prepared by an interdisciplinary team of experts?**		

Preamble: Historically MPI employed an interdisciplinary team of experts including staff from physical damage, public liability (PIPP), actuarial, economics, and finance to develop, from the ground up, the at 12-month number of claims (covers) and claims incurred, by peril, using historical data, field data and emerging trends in vehicle repairs, vehicle technology, medical breakthroughs, etc. These at 12-month values would then be extended to ultimate incurred losses by using the development assumptions from the Appointed Actuary's report.

Currently, as it states on page 5, "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. It is assumed that the historical ultimate losses are the best predictor of future ultimate losses by accident year."

Question:

a) Please explain whether the Corporation used an interdisciplinary team of experts to prepare the claims incurred forecasts as presented in the 2016 GRA. If yes, which disciplines were represented on the Committee?

b) Does the Corporation believe that the Claims Incurred Forecasts are more accurate and provide a greater understanding of the drivers causing changes to claims incurred using its current method compared to the historical method of forecasting number of claims (covers) and claims incurred for rate setting purposes. Please provide a detailed evaluation and commentary of the pros and cons of two methods of forecasting claims incurred.

Rationale for Question:

To assess the robustness by which the claims incurred forecasts are prepared.

CAC (MPI) 1-20

Volume:	**II**	**Page No.:**	**39**
Topic:	**Claims Incurred**		
Sub Topic:	**Collision Claims Incurred**		
Issue:	**Collision Claims incurred forecast for 2015/16 of $371 million compared to actual for 2014/15 of $315 million is increased by $56 million or 17.8%.**		

Preamble: Based on the chart on page 39, the claims incurred for 2013/14 seems to be an 'outlier' compared to the annual claims incurred for years 2010/11 to 2012/13 and 2014/15.

> "In summary, the Corporation believes a higher growth rate is justified as a result of (i) import vehicles are making up an increasing percentage of passenger vehicles, (ii) these imported

vehicles are more expensive to repair and their total loss severity is greater than the domestic vehicles, and (iii) increasing cost of repairs due to changes in vehicle technology, more complex vehicle manufacturing, and use of non-repairable components."

Question:

a) Please provide information that supports the Corporation's believe that a significant portion of the $56 million in annual additional collision claims incurred will result in 2015/16, and carried forward, from import vehicles, changes in vehicle technology and more complex vehicle manufacturing.

b) Please provide supporting information that the Corporation has considered, in their forecasts as presented in the 2016 GRA, resulting in collision claims incurred savings as a result of new vehicle design and manufacturing and collision avoidance technology incorporated into the new vehicles.

Rationale for Question:

To assess the accuracy of the collision claims incurred forecasts.

CAC (MPI) 1-21

Volume:	**II, Appendix A**	**Page No.:**	**1 and 2**
Topic:	**Claims Incurred**		
Sub Topic:	**Collision cover count and severity**		
Issue:	**The collision cover count for fiscal year 2014/15 and 2013/14 are essentially the same but the claims severity reduces from 2013/14 of $3,015 to $2,532 in 2014/15, a decrease of 16%.**		

Preamble: The actual collision claims incurred for 2013/14 were $374.1 million compared to $314.9 million in 2014/15, a decrease of $59.2 million or 15.8%. The decrease in claims incurred reported in 2014/15 compared to 2013/14 is mainly a result of a decrease in collision severity. The covers reported for 2013/14 were 124,066 compared to 2014/15 of 124,343, increase of 277 covers.

Question:

a) Please explain in detail the reason for the significant decrease claims severity (based on covers) of 16% from 2013/14 to 2014/15.

b) Please provide information as per the following table:

Collision Claims Incurred Range ($)	2013/14 (# of Covers)	2014/15 (# of covers)
0 to 500		
501 to 1,000		
1,001 to 1,500		
1,501 to 2,000		
2,001 to 2,500		
2,501 to 3,000		
3,001 to 5,000		
5,001 to 7,500		
7,501 to 10,000		
10,001 to 15,000		
15,001 to 20,000		
20,001 and over		

Rationale for Question:

To assess the reason for the significant decrease in collision cover severity year over year and to determine the financial impact on claims forecasts.

CAC (MPI) 1-22

Volume:	**II**	**Page No.:**	**38**
Topic:	**Claims Incurred**		
Sub Topic:	**Collision severity**		
Issue:	**The collision ultimate severity on page 38 compared to the severity (snap shot) per Appendix A page 2 seem to be moving in different directions for 2014/15.**		

Preamble: Per page 7 of the claims incurred report, 96.97% of collision claims incurred, per the Ultimate analysis table, are reported in the first twelve month (ie. in the current fiscal year) and accordingly one would expect the Ultimate and Fiscal Year severities to move in the same direction and at the same pace. See following table:

Ultimate		Fiscal Year (Snap Shot)			
Accident Year	**Severity ($)**	**Fiscal Year**	**Severity ($)**	**Difference ($)**	**%**
2009/10	2,511	2009/10	2,140	371	17.3%
2010/11	2,553	2010/11	2,385	168	7.0%
2011/12	2,702	2011/12	2,384	318	13.3%
2012/13	2,825	2012/13	2,643	182	6.9%
2013/14	3,002	2013/14	3,015	(13)	(0.4)%
2014/15	3,155	2014/15	2,532	623	24.6%

Question:

Please explain why the ultimate severity of $3,155 is significantly higher than fiscal year severity on a percentage basis especially as compared to previous years.

Rationale for Question:

To assess the reason(s) for the significant increase in the ultimate collision severity impacting the collision claims incurred forecast for rate setting purposes.

CAC (MPI) 1-23

Volume:	**II, Exhibit 5 Table 2**	**Page No.:**	**2**
Topic:	**Claims Incurred**		
Sub Topic:	**Basic Collision Yearly Claims Paid**		
Issue:	**In 2014/15 $101 million collision claims were paid for 2013/14 accident year compared to $80 million the previous year and $67 million forecasted for the next year for the respective accident years.**		

Preamble: See issue above.

Question:

Please explain the significant anomaly for claims paid in excess of $101 million in 2014/15 for accident year 2013/14.

Rationale for Question:

To gain an understanding of claims forecasting data patterns.

CAC (MPI) 1-24

Volume:	**2015 GRA CAC (MPI) 1-7**	**Page No.:**	**a)**
Topic:	**Manitoba Collision Repair Industry Study**		
Sub Topic:	**Update of Study**		
Issue:	**Last year the Auto Body Business in Manitoba Health of the Industry Update – 2012 was filed as part of CAC (MPI) 1-7.**		

Preamble: See issue.

Question:

Since last year, has there been an update prepared to the "Auto Body Business in Manitoba Health of the Industry Update – 2012" study. If yes, please file a copy. If no, please discuss the progress made with respect to the recommendations of the report filed last year.

Rationale for Question:

To assess the progress made with respect to the recommendations made in the collision repair industry study and the effect these activities may have on the claims forecasts.

CAC (MPI) 1-25

Volume:	**III**	**Page No.:**	**Table 1, page 5**
Topic:	**Review Policy Liabilities**		
Sub Topic:	**Review Policy Liabilities – Analysis of Runoff**		
Issue:	**Unfavourable runoff for collision and comprehensive coverages**		

Preamble: The collision coverage experienced unfavourable runoff for insurance years 2007 to 2012 and favourable runoff for insurance year 2013. Comprehensive coverage experienced unfavourable runoff for insurance years 2010 to 2012 and favourable runoff for 2013.

Question:

a) Please elaborate on the causes of the unfavourable runoffs for collision and comprehensive for the years indicated in the preamble as well as the cause of the favourable runoff experienced in the 2013 insurance year for both collision and comprehensive.

b) Please prepare and file a Net Runoff Table for fiscal year 2013/15 similar to Table 1 and elaborate on any significant differences.

Rationale for Question:

To assess and understand the causes of the unfavourable and favourable runoffs experienced in the collision and comprehensive coverages during the last number of years. Is this a normal pattern or an aberration?

CAC (MPI) 1-26

Volume:	**III, AI.7**	**Page No.:**	**280**
Topic:	**Actuarial Report as of October 31, 2014**		
Sub Topic:	**Appendix H: Reconciliation of Paid and Outstanding Claim Amounts**		
Issue:	**Prior Years not in Database and Outstanding Claims difference between database and Financial Controls**		

Preamble: There appears an amount of $5,390,000 of paid claims incurred of prior years not in the database used to prepare the actuarial report (policy liability valuation report). As well there appears to be a difference of $4,245,000 for outstanding claims between the O/S claims database and financial controls.

Question:
Please comment and, if possible, explain the differences as stated in the preamble.

Rationale for Question:
To understand the difference between the various sources of claims data as stated in the preamble.

CAC (MPI) 1-27

Volume:	**I**	**Page No.:**	**14**
Topic:	**Loss Prevention and Road Safety**		
Sub Topic:	**Salvage**		
Issue:	**Salvage sales—a reduction of claims incurred**		

Preamble: "As part of the loss reduction program, total loss vehicles or vehicles stolen and recovered after a theft claim has been settled, are sold as salvage and may, depending on the nature of damage, qualify to be rebuilt to required provincial standards for road use, or may be harvested for undamaged vehicle parts."

Question:

Please provide a detailed operating statement (including the number of vehicles sold, average salvage recovery per vehicle and the operating expenses relating to salvage operations) for salvage vehicle sales for the fiscal years 2013/14 and 2014/15.

Rationale for Question:

To gain an understanding of the impact of salvage sales recoveries on claims incurred.

Cost of Operations, Cost Control and Cost Containment

CAC (MPI) 1-28

Volume:	**III, AI.6, Part 1**	**Page No.:**	**5 and 30**
Topic:	**Provision for employee future benefits**		
Sub Topic:	**Pension benefit plan – Remeasurement (gains) losses recognized in OCI increase substantially year over year.**		
Issue:	**Year over year increase of $44.7 million from ($12.8) million in 2014 to $31.9 million in 2015.**		

Preamble: See subtopic.

Question:

a) Please provide a detailed explanation, including the economic assumptions, as to the rationale for the remeasurement of the pension benefit plan in 2015 resulting in a loss of $31.9 million. Please confirm that there is no financial impact to the forecasted financial results.

b) Please file a copy of the actuarial pension and Other benefit plans reports prepared as at December 31, 2014.

Rationale for Question:

To clarity and understand reported financial results and costs of operations impacting future financial forecasts.

CAC (MPI) 1-29

Volume:	I, Overview	Page No.:	15
Topic:	Claims Service Centers		
Sub Topic:	Space Utilization		
Issue:	With the rapid introduction of IT into MPI's processes, the potential partnering with the repair industry to possibly perform the claims estimating function, brokers handling most of the policy and driver license issuance function—the question is: is the space at the various service centres utilized to the maximum?		

Preamble: "Manitoba Public Insurance customers receive exemplary service when and where they want it. While a private insurer would likely not provide a guarantee of a claims service centre within a one hour drive for 90% of their customers, Manitoba Public Insurance does."

Question:

a) Please discuss whether the rapid introduction of IT into MPI's processes will, in the coming years, reduce the space MPI will require at the various service centres? If yes, how will MPI handle the access space capacity?

b) Please provide insight into the patter of consumer usage of the service centre, including how usage is measured, how usage has changed over the last five years and how staffing has adjusted to changing patterns of usage.

Rationale for Question:

To understand whether space usage is being financially optimized.

CAC (MPI) 1-30

Volume:	**I, Overview**	**Page No.:**	**17**
Topic:	**Cost Containment**		
Sub Topic:	**Committee**		
Issue:	**Terms of Reference**		

Preamble: "The Corporation, through the Innovation and Cost Containment Committee, is continuing its cost conscious culture."

Question:

Please file a copy of the most recent Innovation and Cost Containment Committee's Terms of Reference if different from the Committee Objectives as described on page 5 of Volume I, Cost Containment document.

Rationale for Question:

To better understand the current mandate of the Innovation and Cost Containment Committee and the actions to be taken to contain costs going foreward [*sic*].

CAC (MPI) 1-31

Volume:	**I, Overview**	**Page No.:**	**21**
Topic:	**Benchmarking**		
Sub Topic:	**Ward Group (benchmarking) and Gartner Consulting (CIO Scorecard)—year-end data alignment**		
Issue:	**Was there an inconsistency of the year-end dates used in the past for the Ward Group benchmarking work and Gartner Consulting CIO Scorecard?**		

Preamble: "This year, in order to align the benchmarking information of the two main providers of this information, Ward Group and Gartner Consulting, the Corporation realigned the receipt of the Gartner CIO scorecard to coincide with the annual benchmarks provided by the Ward Group, which also requires year end data."

Question:

a) Please provide the year-end dates for which data was used for the Ward Group benchmarking work and the Gartner Consulting CIO Scorecard work in the past.

b) Please provide the year-end dates for which data will be used going forward in preparing the benchmarks and CIO scorecard.

Rationale for Question:

To better understand and clarify the impact in preparing the benchmarks and CIO Scorecard by using data from different year-end dates by the two consulting organizations.

CAC (MPI) 1-32

Volume:	**I**	**Page No.:**	**1 to 10**
Topic:	**Cost Containment**		
Sub Topic:	**Forecast fiscal years 2016/17 and 2017/18**		
Issue:	**Projected Cost Containment Reductions**		

Preamble: In Attachment A and B the Innovation and Cost Containment Committee reported and documented, by detailed account category, the various operating expense reductions for 2015/16 budget.

Question:

Please advise whether the normal operating and claims expenses were reviewed, in the same manner as the 2015/16 budget, for the forecast years 2016/17 and 2017/18 (the rating years)? If yes, please provide an analysis, by year, similar to Attachment A and B referenced in the preamble comparing expenses reported in the 2015 GRA compared to the 2016 GRA.

Rationale for Question:

To ensure that operating and claims expenses are fair and reasonable.

CAC (MPI) 1-33

Volume:	I, Benchmarking	Page No.:	34 and 35
Topic:	Internal Operational Measures		
Sub Topic:	Annual Compound Growth		
Issue:	Measure cost containment impact on annual compound growth.		

Preamble: MPI has taken steps to stem the growth of operating expenses, especially for the 2015/16 budget.

Question:

Please re-file the internal operating measures as reported on pages 34 and 35 by adding one additional Annual Compound Growth column showing the annual compound growth for four years from 2014/15 to 2017/18.

Rationale for Question:

To assess and understand the impact of the recent cost containment measures on forecasted expenses.

CAC (MPI) 1-34

Volume:	III, Benchmark	Page No.:	1 and 7
Topic:	Operational Efficiency and Claims Performance		
Sub Topic:	2014/15 values and Targets		
Issue:	Values for 2014/15 not reported and also can targets be established.		

Preamble: In its benchmarking reports MPI did not provide measures for fiscal year 2014/15 and establish targets for operations and claims performance. In the benchmarking report in Volume I it indicates in various sections (see page 12 for example) that, due to MPI's business model, some measures may not be directly comparable to the Canadian Personal Auto Group, Canadian Benchmark Group and the

US Personal Auto Group. In these instances it may be appropriate and helpful to establish internal benchmark targets to assist in containing costs.

Question:

a) Please advise if the Ward Group is in a position to provide the 2014/15 measures for MPI, if yes, please update and file the measures as reported in Appendix 1 of Volume III, Benchmark App.

b) Please comment as to what would prevent MPI from establishing internal benchmark targets for at least those measures which are unique to MPI's business model.

Rationale for Question:

To assess the impact of more current MPI measures relative to previous years and internal benchmark targets may strengthen the current cost containment work.

CAC (MPI) 1-35

Volume:	**III, Benchmark**	**Page No.:**	
Topic:	**Appendix 1 – Corporate Measures**		
Sub Topic:	**Corporate vs. Basic Insurance**		
Issue:	**Basic Insurance sub-set**		

Preamble: Appendix 1 report benchmark measures on a corporate level and not for basic insurance.

Question:

Please advise if the Ward Group can provide the measures in Appendix 1 for Basic Insurance only. If yes, please file a copy. If not, please explain the issues preventing a basic insurance set of benchmarks.

Rationale for Question:

To assess a basic insurance set of benchmark measures for operational and claims performance.

CAC (MPI) 1-36

Volume:	**III Benchmark**	**Page No.:**	**4**
Topic:	**Operational Efficiency**		
Sub Topic:	**Ratio of staff to management**		
Issue:	**MPI's ratio is somewhat lower compared to the benchmark group.**		

Preamble: "To achieve a span of control of 6.00 and be comparable with the benchmark group, the Corporation would have to increase staff by 14 FTEs and decrease management by 14 FTEs."

Question:

Please elaborate as to why MPI is suggesting to increase staff and decrease management by the same FTE's to achieve a comparable measure to the benchmark group. Please comment if MPI sees an opportunity to rationalize management FTEs without increasing staff FTEs and achieve benchmark group comparability.

Rationale for Question:

To assess an opportunity for further cost containment.

CAC (MPI) 1-37

Volume:	**II**	**Page No.:**	**17**
Topic:	**Expenses -- Compensation**		
Sub Topic:	**Health and Well Being Flexible Spending Account**		
Issue:	**Financial impact of the Health and Well Being Flexible Spending Account**		

Preamble: "Other Salary Adjustments. This category also contains the Health and Well Being Flexible Spending Account and an allowance for staff who work in downtown Winnipeg."

Question:

a) Please explain the purpose of the Health and Well Being Flexible Spending Account.

b) Please quantify the cost/benefits achieved to date and forecasted for 2015/16 and 2016/17 as a result of the Health and Well Being initiative.

Rationale for Question:

To assess the cost/benefits of the Health and Well Being Flexible Spending Account on forecasted operating costs.

CAC (MPI) 1-38

Volume:	**II**	**Page No.:**	**11**
Topic:	**Expenses**		
Sub Topic:	**Special Services**		
Issue:	**Special services expenses are increasing by 26% from 2014/15 to 2015/16 and 20% from 2015/16 to 2016/17.**		

Preamble: Corporate special service expenses are increasing substantially from $6.9 million in 2014/15 to $8.7 million in 2015/16 to $10.4 million in 2016/17.
On pages 19 (Appendix 6), 21 (Appendix 6) and 24 (Appendix 6) it indicates special services expenses include provisions for PIPP mediation, PDR projects and provisional projects expenses for Data Processing.

Question:

Please prepare and file an analysis, by project, of the Special Services account comparing fiscal years 2014/15 (actual), 2015/16 (projected) and 2016/17 (projected). Please also elaborate on the purpose and reason of projects being financially provided for in the Special Services Account as opposed to in the Deferred Development Cost account.

Rationale for Question:

To assess the reason(s) for the increase in special services expenses as it relates to rate setting.

CAC (MPI) 1-39

Volume:	II, Appendix 12	Page No.:	35
Topic:	Expenses		
Sub Topic:	Capital Expenditures		
Issue:	Delay of PDR project		

Preamble: "Specifically of note is the differences related to the PDR project. In last year's GRA, it was expected that over $16M would be spent on deferred development as it relates to Basic in 2014/15, when the actual spend was only $7.4M. A similar variance is seen in 2015/16. The reason for this is the project completion date has been delayed and thus, those under budget costs are now anticipated to be spent in 2018/19 and 2019/20."

Question:

Please elaborate on the reasons for the delay in moving forward with the PDR project.

Rationale for Question:

To understand the causes for the delay in moving forward with the PDR project as it relates to basic insurance.

CAC (MPI) 1-40

Volume:	**II and 2015 GRA CAC (MPI) 1-46**	**Page No.:**	**11**
Topic:	**Expenses**		
Sub Topic:	**Budgeting**		
Issue:	**Comparisons of budget to actual expenses and compliance to budget guidelines**		

Preamble: See issue above.

Question:

a) Please provide the approved corporate budget for ongoing operations and for new projects and initiatives for the 2014/15 fiscal year for Basic Insurance and the Corporation.

b) Please show variances between the approved budget and actual results and explain any significant variances.

c) Please provide the budgetary guideline for ongoing operations in 2014/15 and indicate whether this guideline was met.

d) Please provide the approved budget for ongoing operations and for new projects and initiatives for the 2015/16 fiscal year for Basic Insurance and the Corporation.

e) Please provide the budgetary guideline for ongoing operations in 2015/16 and indicate whether this guideline was met.

Rationale for Question:

To gain an understanding of the budget process, guidelines and procedures adhered to by the corporation and how this process impacts future operations.

CAC (MPI) 1-41

Volume:	**2015 GRA CAC (MPI) 1-53**	**Page No.:**	
Topic:	**Expenses**		
Sub Topic:	**2014 Compensation Report**		
Issue:	**2014 Compensation Report**		

Preamble: Per the Public Sector Compensation Disclosure Act the corporation prepares a compensation report.

Question:

Please file a copy of the public compensation report as of December 31, 2014 prepared in accordance with the Compensation Disclosure Act together with the Auditor's report.

Rationale for Question:

To assess and understand compensation costs at MPI.

IT Strategy and Business Improvement Initiatives

CAC (MPI) 1-42

Volume:	**I, IT Strategy**	**Page No.:**	**30**
Topic:	**Product and service innovation**		
Sub Topic:	**Insurance industry innovation**		
Issue:	**Six principles will drive insurance industry innovation over the next decade.**		

Preamble: "In order to meet consumer demand and maximize the potential returns on technology investments, insurers must make innovation a way of life."

Question:

a) Please explain and elaborate on the six principles, including an order of magnitude impact on MPI's financial forecasts, which will drive the insurance industry innovation:

- Change the user interface,
- Capture contextual data,
- Use technology from adjacent industries,
- Collaborate with users,
- Make infrastructure agile,
- Manage risk dynamically.

b) Please discuss whether SGI and ICBC are pursuing technology integration and solutions at the same pace as MPI.

Rationale for Question:

To understand the impact on projected financial results, potential costs and cost savings impacting MPI's operations by technological innovations listed in the question.

CAC (MPI) 1-43

Volume:	**I, IT Strategy**	**Page No.:**	**34**
Topic:	**Internal change**		
Sub Topic:	**Legacy platforms**		
Issue:	**20-year old technology platforms: AOL and CARS**		

Preamble: "MPI's situation is further exacerbated by the fact that our two most strategic Tier 1 business applications, Autopac On-Line (AOL) and CARS are based on these 20-year old technology platforms."

Question:

a) Please confirm that CARS (Claims Administration and Reporting System) is being replaced by BI[3] and PDR, if not please elaborate.

b) Please elaborate on MPI's plans to modernize the AOL system.

Rationale for Question:

To understand the technological impact on projected financial results and potential cost containment undertakings.

CAC (MPI) 1-44

Volume:	**I, IT Strategy**	**Page No.:**	**40**
Topic:	**I, IT Strategy**		
Sub Topic:	**Physical Damage Re-engineering**		
Issue:	**2016 GRA total project cost $59,509,000; 2015 GRA Vol III, AI.10 page 8 $65,485,774**		

Preamble: Please see Issue above.

Question:

In the current GRA the total projected PDR costs are reported to be $59.5 million compared to the 2015 GRA projected costs of $65.5 million. Please explain the difference of $6.0 million

Rationale for Question:

To clarify the correct projected PDR costs.

CAC (MPI) 1-45

Volume:	**I, IT Strategy**	**Page No.:**	**40**
Topic:	**Project Summaries**		
Sub Topic:	**Other - miscellaneous**		
Issue:	**The LTD cost is reported at $56,997,000**		

Preamble: There are no details provided in the IT Strategy document related to Other – miscellaneous.

Question:

Please provide a listing of the detailed projects and the related LTD costs and projected costs (by project).

Rationale for Question:

To clarify the projects contained in Other – miscellaneous line on the project summary statement.

CAC (MPI) 1-46

Volume:	**I, IT Strategy**	**Page No.:**	**40 and 57**
Topic:	**HRMS – Phase 3 & 4**		
Sub Topic:	**HRMS – Phase 3 & 4**		
Issue:	**Benefits achieved to date as a result of implementing HRMS Phase 1 & 2**		

Preamble: See Issue above.

Question:

a) Please provide the actual implementation costs of HRMS to-date compared to forecast by phase.

b) Please provide a description of the actual benefits achieved to-date along with dollar value of these benefits.

c) Should the HRMS system prove to be overly costly to retain and maintain going forward, from a cost benefit perspective, has MPI considered alternative HRMS processes or systems?

Rationale for Question:
To gain an understanding of possible costs of operation containment opportunities going forward.

CAC (MPI) 1-47

Volume:	**I, IT Strategy**	**Page No.:**	**71 to 73**
Topic:	**High School Driver Education**		
Sub Topic:	**Roadmap and Business Case**		
Issue:	**Business Case report**		

Preamble: "A high-level project roadmap and business case is targeted to be completed by the summer of 2015".

Question:
Please file a copy of the High School Driver Education project roadmap and business case once it is completed in the summer of 2015.

Rationale for Question:
To learn the cost impact on future operating costs and claims incurred savings.

CAC (MPI) 1-48

Volume:	**I, PUB Orders**	**Page No.:**	**6**
Topic:	**PDR Update**		
Sub Topic:	**Electronic Estimating**		
Issue:	**Cost of software provided to the repair trade**		

Preamble: "Manitoba Public Insurance has made available to the trade a robust electronic estimating tool from Mitchell International." "Manitoba Public Insurance has made available to the trade, mechanisms to access the latest repair processes as promoted by manufacturers through the Mitchell software tools;"

Question:

a) Please provide a detailed breakdown of the implementation costs as well as the annual operating costs relating to the Mitchell estimating tool provided to the repair trade.

b) Please comment on how the repair trade is compensated for preparing claims estimates, if at all.

c) Please describe the mechanisms to access the latest repair processes enabled by Mitchell software and also provide the implementation and ongoing annual operating costs, if any.

Rationale for Question:

To obtain, an order of magnitude understanding, of the costs associated with new estimating processes being developed as part of the PDR project.

CAC (MPI) 1-49

Volume:	2015 GRA CAC (MPI) 1-56	Page No.:	
Topic:	Expenses		
Sub Topic:	External Audit and Actuary Fees		
Issue:	Fees and work performed by the external auditor and external actuary.		

Preamble: An external auditor and actuary are appointed to provide professional services with respect to the annual attest audit and policy liability valuation to provide assurance that both the public financial statements and policy liability values are reasonable.

Question:

Please complete the following table by fiscal year:

	2014/15 Actual	2015/16 Budget
External Auditor:		
a) Audit fees		
b) Consulting/other fees		
Appointed Actuary:		
a) Valuation fees		
b) Consulting/other fees		

a) For both the external auditor and the appointed actuary please explain the purpose and reports produced and fees paid for consulting and other services, if any.

b) Please file a copy of the engagement letter (service contract) for both the external auditor and actuary as it relates to their services for 2014/15.

Rationale for Question:

To assess and understand the services provided, in addition to the attest audit and policy liability valuation professional services, in the form of professional consulting services.

CAC (MPI) 1-50

Volume:	**2015 GRA CAC (MPI) 1-60**	**Page No.:**	
Topic:	**Expenses**		
Sub Topic:	**Donations and Sponsorships**		
Issue:	**Donations and sponsorships expenses for 2014/15**		

Preamble: On an annual basis MPI makes donations and provides sponsorships to various organizations and events.

Question:

Please provide a detailed schedule of donations and sponsorships made by MPI during fiscal year 2014/15.

Rationale for Question:

To assess and understand the financial impact of donations and sponsorships, a discretionary expense, on basic insurance operations.

CAC (MPI) 1-51

Volume:	2015 GRA CAC (MPI) 1-62	Page No.:	
Topic:	Expenses		
Sub Topic:	Claims and Operating Expenses statistics		
Issue:	To assess operating and claims expenses as a measure of basic earned vehicle units.		

Preamble: See issue above.

Question:

a) Please update and file Tables 1 to 4 as per CAC (MPI) 1-62 from the 2015 GRA with 2016 GRA "actual" and "forecasted" information.

b) Please elaborate on any significant differences from last year's values.

Rationale for Question:

To assess and understand the improvement in increasing operating and claims expenses over time as a measure of basic earned vehicle units.

Road Safety

CAC (MPI) 1-52

Volume:	I	Page No.:	28
Topic:	Loss Prevention and Road Safety		
Sub Topic:	Fatal Collision Statistical Table		
Issue:	Clarification		

Preamble: The table on page 28 reports statistics for Fatal/10,000 Drivers and Killed/10,000 Drivers.

Question:

For greater clarity please explain the difference between fatal and killed per 10,000 drivers.

Rationale for Question:

To clarify the difference between the two statistics reported in the table.

CAC (MPI) 1-53

Volume:	III, Appendix 1	Page No.:	
Topic:	Loss Prevention and Road Safety		
Sub Topic:	Loss Prevention Strategy & Framework for Manitoba Public Insurance prepared by IBM		
Issue:	Additional information and clarification		

Preamble: MPI engaged the professional services of IBM to develop the Loss Prevention Governance Framework.

Question:

Please provide the following documentation and information:

a) A copy of the IBM engagement letter, including costs;

b) A copy or description of "MPI Value Management Business Case" process;

c) A copy of the designed "portfolio evaluation framework";

d) A copy of a draft "loss prevention portfolio scorecard";

e) A copy of the Terms of Reference for the "Loss Prevention Internal Working Committee".

Rationale for Question:
To assist in the evaluation of IBM's work as it relates loss prevention undertaken at MPI. To better understand the prudence and reasonableness of the process.

CAC (MPI) 1-54

Volume:	**III, AI.13, Appendix 6**	**Page No.:**	**PDF 25**
Topic:	**Loss Prevention and Road Safety**		
Sub Topic:	**Road Safety Programming Principles**		
Issue:	**Measuring success**		

Preamble: "Road safety programming efforts are continuously monitored and evaluated in a consistent manner to measure their effectiveness against established performance indicators and outcomes."

Question:
Please provide a copy of the 2014/15 fiscal year monitored and evaluated road safety programming status reports measuring their effectiveness against established performance indicators and outcomes, in addition to the Graduated Driver Licensing Program (Appendix 3) and Driver Education Program (Appendix 4), if any.

Rationale for Question:

To review the effectives of various road safety programs in 2014/15.

CAC (MPI) 1-55

Volume:	**III, AI.13, Appendix 10**	**Page No.:**	**5, 48**
Topic:	**Loss Prevention and Road Safety**		
Sub Topic:	**Review of MPI's Road Safety Program Model**		
Issue:	**Additional information and clarification**		

Preamble: MPI engaged the services of Sirius Strategic Solutions Ltd. to perform a Review of MPI's Road Safety Program Model. In the report's conclusion (page 48) it states:

> "The principles, guidelines, policy and procedures captured in documentation are extensive, thorough, and reflected in the road safety research and literature on best practices. Their aggregation and support by corporate Executive to date, is not found in any other Canadian jurisdiction. While elements of this work are found internationally, collectively they form a superior program model, which when fully integrated and refined, should be shared as an ideal, recognizing that the model will continue to evolve, be flexible and transparent."

With respect to funding road safety, the report states on page 5 "Research has shown fairly conclusively that without secure and stable funding, significant action to improve road safety is unlikely."

Question:

a) Please provide a copy of Sirius Strategic Solutions Ltd. engagement letter, including costs;

b) With the implementation of the External Stakeholder Committee on Loss Prevention and the Provincial Road Safety Committee, which may broaden the current road safety and loss prevention activities in Manitoba, can MPI comment on how the funding for road safety and loss prevention will be secure, sustainable and stable going forward.

c) Please indicate whether MPI intends to call Ms. Kroeker-Hall as a witness in this proceeding.

Rationale for Question:

To assist in the evaluation of Sirius Strategic Solutions Ltd. work as it relates to road safety undertaken at MPI.

CAC (MPI) 1-56

Volume:	**2015 GRA CAC (MPI) 1-192**	**Page No.:**	
Topic:	**Road Safety Program History**		
Sub Topic:	**Introduction of Road Safety programs**		
Issue:	**Update road safety program history**		

Preamble: Road Safety Program History Update

Question:

Please review CAC (MPI) 1-192 from last year's GRA and provide updated responses to a), b) and c) for 2015/16

Rationale for Question:

To maintain a history of road safety programs and issues they are intended to address.

CAC (MPI) 1-56b

Volume:	2015 GRA CAC (MPI) 1-194	Page No.:	
Topic:	Road Safety		
Sub Topic:	Inter-Jurisdictional Comparison for Casualty Rates		
Issue:	Update to current		

Preamble: Update inter-jurisdictional comparison for casualty rates to current.

Question:

Please update the Inter-Jurisdictional Comparison for Casualty Rates table, included in the 2015 GRA, to current.

Rationale for Question:

To review and gain an understanding of the annual changes in Inter-Jurisdictional casualty rates over time.

CAC (MPI) 1-57

Volume:	I, Attachment A	Page No.:	1
Topic:	Loss Prevention and Road Safety		
Sub Topic:	Road Safety Expenses – Basic's Share		
Issue:	Detailed Expenses by account including departmental expenses.		

Preamble: The expenses for Road Safety on Attachment A in Volume 1 (Loss Prevention and Road Safety are detailed by Program Category. In the last year's GRA per CAC (MPI) 1-195 the Road Safety expenses were detailed by expense account including the departmental expenses which provided further insight into the cost of road safety.

Question:

Please update and file the Road Safety Expenses – basic share table from the 2015 GRA to include 2014/15 actual, forecast for 2015/16 and projected for 2016/17.

Please explain any significant changes year over year.

Rationale for Question:

To assess the road safety expenses by account including the related departmental expenses to obtain a fuller insight into total cost of road safety.

Allocations

CAC (MPI) 1-58

Volume:	III, AI.6, Part 1	Page No.:	5 and 26
Topic:	Property and equipment		
Sub Topic:	Allocation adjustment		
Issue:	Validation of allocation formulas		

Preamble: The allocation adjustment for property and equipment for 2014/15 is reported as $15,263,000 compared to 2013/14 of $(4,713,000), an increase of $19,976,000.

Question:

a) Please provide a detailed explanation, rationale and analysis of the reported allocation adjustment to the property and equipment account.

b) Please provide the financial impact to the statement of operations for 2014/15 and the financial impact to the financial forecasts, it any.

Rationale for Question:

The allocation adjustment seems unreasonably high compared to last year and the cause needs to be verified to validate the allocation formulas.

Investments

CAC (MPI) 1-59

Volume:	II	Page No.:	5
Topic:	Investment Income		
Sub Topic:	Investment Performance Report		
Issue:	Investment performance for the last fiscal year and current quarter as measured by a third party.		

Preamble: See issue above.

Question:

Please file a copy of the February 28, 2015 and May 31, 2015 investment performance reports reviewed and received as information by the Investment Committee of the Board of Directors which were prepared by a third party, if any.

Rationale for Question:

To assist in understanding the most recent investment performance of the corporate investment portfolio prepared by a third party.

Risk Management

CAC (MPI) 1-60

Volume:		Page No.:	
Topic:	Risk management and risk profile		
Sub Topic:	Risk management and risk profile		
Issue:	Confirmation of material risk changes and material transactions in progress or outstanding impacting the 2016 GRA, if any.		

Preamble: See issue above.

Question:

a) Please indicate, list and explain any technical, process, information technology or management constraints that the PUB should take into consideration in issuing its 2016 GRA ruling effective March 1, 2016, if any.

b) Please indicate, list and explain any financial transactions under consideration or in progress that have not been explicitly reported in the 2016 GRA, either by management, the Board of Directors or Government, which could impact the 2016 GRA proposed rates, if any.

c) Please indicate whether there have been any material changes to the Corporation's risk profile since last year's GRA, with respect to financial risk, operational risk, continuation of service risk, unpaid claims risk, information technology risk or with respect to any other risk factors. If so, please elaborate and provide details.

d) Please indicate whether the Corporation expects any changes to its risk profile going forward through the outlook period. If so, please elaborate and provide details.

Rationale for Question:

Assess material risk profile changes or material transactions in progress or outstanding potentially impacting the 2016 GRA forecasts, if any.

Revenues

CAC (MPI) 1-61

Volume:	**III, AI.6, Part 1**	**Page No.:**	**5**
Topic:	**Accounts Receivable**		
Sub Topic:	**Increase, year over year, of accounts receivable by $112.7 million or 47% mainly relating to subrogation and other receivables see note 24 page 40.**		
Issue:	**Impacts claims incurred or revenues.**		

Preamble: See subtopic.

Question:

Please provide a detailed explanation of the change in subrogation and other receivables increasing from $26.4 million in 2014 to $101.4 million in 2015 or an increase of $75 million. If the increase was caused by an accounting policy change, please provide a copy of the updated accounting policy.

Rationale for Question:

Assess financial impact on projected financial results and obtain greater clarity and understanding of reported financial results.

CAC (MPI) 1-62

Volume:	**II**	**Page No.:**	**5**
Topic:	**Revenues**		
Sub Topic:	**Adjustments**		
Issue:	**Reductions in premiums written described as adjustments is not clear.**		

Preamble: See Issue above.

Question:

Please explain the following deductions from premiums written:

b) 2014/15 adjustments of $(2,906,000)

Rationale for Question:

To assess and understand the reason(s) for the deduction from premiums written in 2014/15.

<u>CAC (MPI) 1-63</u>

Volume:	**Investment Income**	**Page No.:**	**23, 28, Attachment A & 1, 2 Attachment D**
Topic:	**Interest Rate Risk**		
Sub Topic:	**Investment Policy Statement Attachment A** **Operational Asset Liability Management Policy Attachment D**		
Issue:	**Understanding the degree of asset and liability mismatching risk**		

Preamble: CAC observes that the Investment Policy Statement in paragraph 8.4 used to provide for the use of "Macaulay duration" as the measure of the fixed income risk relative to the claims liability. The April 10, 2015 document deletes the reference to "Macaulay".

Section 10.6 on page 28 of the IPS provides that the "Corporation monitors" compliance on a "monthly basis" and reports to the Investment Committee Working Group on a "quarterly basis".

Section 10.6 of the IPS noted the Corporation's "graduated investment manager compliance policy ... with escalating action based upon the degree of non-compliance".

Section 10.6 of the IPS also provides that the "Corporation evaluates the compliance with the defined duration bandwidth **<u>as defined in Section 8.4</u>** on a "monthly basis" and reports to the Investment Committee on a "quarterly basis". [Emphasis added.] CAC observes that the word "bandwidth" does not appear in Section 8.4.

Manitoba Public Insurance

Section 10.6 of the IPS also provides certain "COMPLIANCE RULES" and defined a variance of "less than 10%" as "minor" and for other rules "**<u>All breaches … are considered major</u>**"". [Emphasis added]. CAC observes that the "COMPLIANCE RULES" do not include a reference to duration variances, and do not establish a 10% threshold for determining whether the non compliance is a "major" or "minor" event.

Section V of the Operational Asset Liability Management Policy, effective August 31, 2015, provides for a bandwidth of +/- 0.25 years.

CAC understands that Section V of the Operational Asset Liability Management Policy, effective August 31, 2015, provides for what appears to be a quarterly lag in that the "claims duration target … for the current quarter will be based on" the duration "at the end of the previous quarter **<u>unless another duration target is provided by the ICWG.</u>** The … manager will have until the end of the current fiscal quarter to reach the new duration target". [Emphasis added]. CAC notes that Section VI of the Operational Asset Liability Management Policy, effective August 31, 2015, requires that the "claims liability duration will be updated ... on a monthly basis".

Section VI of the Operational Asset Liability Management Policy, effective August 31, 2015, provides for "Modified duration ... unless effective duration is a more appropriate measure."

CAC (MPI) I-146 filed July 31 2014 provided the fixed income duration and the liability duration, the variance and quantum of the fixed income assets and claims liabilities for certain periods. CAC observes that in certain of those periods the variance duration was greater than 10% of the bandwidth, and perhaps those greater variances would represent a "major" breach of compliance policies. CAC also notes that the Liability Duration was relatively constant from February 2010, changing only on August 2010, August 2011, August 2012, and February 2014. CAC also notes that some of the information in CAC (MPI) I-146 filed July 31 2014, does not reconcile with information provided in Table 15.3 in Investment Income on page 74.

Question:

a) Please update CAC (MPI) I-146 filed July 31 2014, to the most current date available at the time of response, and (1) please provide a footnote for each period in which fixed income assets were excluded from the duration calculation including the quantum of fixed assets excluded and the pro forma duration value had those fixed income assets not been excluded from the calculation (2) please include a column showing the fixed income portfolio turnover during that period [on a quarterly basis if available or annual basis if quarterly numbers are not available].

b) For all common dates, please reconcile the data inconsistencies between Table 15.3 and CAC (MPI) I-146 filed July 31 2014, including but not limited to the May 2013 data points, in which the "Variance Duration" in CAC (MPI) I-146 or "Difference" in Table 15.3 is either -1.7 or -0.6.

c) What is the current [pre August 1, 2015] "defined duration bandwidth **as defined in Section 8.4**", [Emphasis added] where is it defined, and if the definition is contained in a document not on the record, please provide the document?

d) Please discuss what the Corporation does as it "evaluates the compliance with the defined duration bandwidth **as defined in Section 8.4** on a "monthly basis", [Emphasis added] including its response, if any, to instances in which the defined duration bandwidth has been greater than 2.20 during a +2 period [e.g. May 2010, August 2010 and November 2012], or greater than 1.1 during a +1 period, where, perhaps, the breaches of compliance were "considered major", in light of its "graduated investment manager compliance policy ... with escalating action based upon the degree of non-compliance".

e) Please discuss what the Investment Committee does as it "evaluates the compliance with the defined duration bandwidth **as defined in Section 8.4** on a "quarterly basis", [Emphasis added] including its response, if any, to instances in which the defined duration bandwidth has been greater than 2.20 during a +2 period [e.g. May 2010, August 2010 and November 2012], or greater than 1.1 during a +1 period, where, perhaps, the breaches of compliance were "considered major", in light of its "graduated investment manager compliance policy ... with escalating action based upon the degree of non-compliance".

f) Please discuss the response of the Corporation or the ICWG to a minor breach by a manager, and contrast that to the appropriate response to a "major" breach.

g) Are we correct in thinking that, effective August 1, 2015, a duration variance of greater than 0.275 years [0.25 + 0.025=0.275] being greater than 10% of the allowed variance, would be actionable as a major breech?

h) Under the new policy would the duration target [+/- 0.25 "years"] that the fixed income manager would be expected to reach or approximate, as at August 30, 2015 be the claims liability duration as at May 30, 2015, and if not, what would be the date of the then target?

i) Why is there no compliance rule related to duration in Section 10.6 of the IPS, or perhaps a duration compliance rule is found elsewhere?

j) Which duration methodology has been used subsequent to the April 10, 2015, deletion of the word "Macaulay", in these monthly evaluations?

k) Please discuss the factors which will be used to determine whether "Modified duration" or "effective duration is a more appropriate measure"?

l) Please quantify the effect, if any, in the calculation of the Fixed Income Duration and Liability Duration of the use of Macaulay, modified and effective methods for the most recent period for which data is convenient.

m) As the "claims liability duration will be updated ... on a monthly basis", would it not "prove valuable", as AON Hewitt observed on PDF page 19 of the Phase I report, and reduce the interest rate risk if the fixed income manager were provided with targets on a more frequent basis than quarterly?

n) What circumstances were contemplated or anticipated by Section V of the Operational Asset Liability Management Policy, effective August 31, 2015, which provided for the ICWG to provide the manager with "**another duration target"** [Emphasis added] other than the prior quarter's calculation, in addition to its power to remove assets from the duration calculation?

Rationale for Question:

Understanding the policies that will be in force on August 1, 2015, compared to current policies, how they will be monitored, and how the policy limit is calculated. The information will provide insight into the reliability of forecasting including the prudence of relying on duration targets. It also will assist in understanding the risks relevant to ratesetting.

CAC (MPI) 1-64

Volume:	**Investment Income**	**Page No.:**	**27 Attachment A 19 ,44, Attachment B 1 Attachment H**
Topic:	**Interest Rate Risk**		
Sub Topic:	**Asset Liability Study Phase I Attachment B Investment Policy Statement Attachment A Benchmarking Returns Attachment H**		
Issue:	**Understanding the return benchmarks**		

Preamble:

Aon Hewitt proposes a new benchmark for the fixed income assets on pdf page 19 of Attachment B. Appendix F, pdf page 44, provides more information on the methodology and recommends an exclusion of certain "new inflows". Section 10.5 of the Investment Policy Statement states the new fixed income portfolio benchmark is the "Return on the present value" of certain cash flows.

Question:

a) Has MPI adopted the AON Hewitt benchmark recommendation, and methodology, or are there other inclusions, exclusions, or adjustments in MPI's method [perhaps targets differing from those determined on a formulaic basis], that are incorporated by MPI?

b) Discuss the effect of excluding new cash flows as AON Hewett recommends for validity and transparency of the new benchmark and operationally in respect of:

  i. the quarterly or monthly availability of new claims durations, and

  ii. the quarterly lag in which the manager is to conform to each new target.

c) With the "Operational Asset Liability Management Policy" taking effect August 31, 2015, please discuss the transitional measures and transitional reporting which MPI anticipates employing.

d) To assist in understanding the reporting change that the use of the new benchmark will require, from that provided in Investment Income Attachment H, please provide the "MPI Annual Return ending February 28, 2015" and the "Annual Expected Return Benchmark ending February 28, 2015" for "MPI Total Fund" and "Fixed Income" asset categories, on the basis of the new benchmark.

	MPI Annual Return ending February 28, 2015	Annual Expected Return Benchmark ending February 28, 2015
MPI Total Fund	%	%
Fixed Income		
Cash	%	%
Marketable Bonds	%	%
Universe Bonds	%	%
Long Term Bonds	%	%
Non-Marketable Bonds	%	%

Rationale for Question:
Clarification of the benchmarks to be employed for the fixed income assets which has relevance for the prudence and reasonableness of operations. CAC seeks to understand the degree to which the Aon Hewitt recommendation is being implemented, and whether there will be operational, transparency, communication or transitional issues as a result of a change in the benchmark related perhaps to as much as 80% of the Investment assets of MPI

CAC (MPI) 1-65

Volume:	**I Overview II Investment Income**	**Page No.:**	**39 Overview 10, 69 Investment Income**
Topic:	**Investment Income**		
Sub Topic:	**Interest rate forecasting**		
Issue:	**Ensuring the reasonableness of the Forecast Interest Rate Assumptions**		

Preamble: CAC observes, at page 39 in the Overview, that MPI discusses the "projected rising interest rates" and noted that "investment income is expected to deteriorate significantly in the rating years".

Chart 13.1, at page 69 in Investment Income shows the MPI forecast methodology compared to the Actual interest rates for the GOC 10 year rate. The Chart indicates forecast errors for periods commencing from the date of the forecast and particularly for periods longer than 6 quarters from the date of the forecast.

At page 10 in Investment Income, MPI notes that the low forecast of investment income is "negatively impacted" by over $151 million in "losses in on the marketable bond portfolio" in the rating years "(2016/17 and 2017/18)". CAC observes that a more accurate forecasting methodology would reduce the over forecasting of "losses in on the marketable bond portfolio".

Question:

a) Is the MPI interest rate forecast used in any other aspect of the financial modeling other than the anticipated interest income, value changes in the marketable bond portfolio, and the discount rate for claims liabilities?

b) What steps, if any, has MPI taken to further refine its interest rate forecasting methodology to improve its accuracy?

c) Other than the discounting of claims liabilities, what other aspects of the financial position of MPI would be affected by a more accurate forecast of future interest rates, perhaps pension liabilities, formerly equity returns?

Rationale for Question:

Recognizing challenges in interest rage [*sic*] forecasting, to understand the implication of more accurate forecasting on the overall forecast.

<u>CAC (MPI) 1-66</u>

Volume:	**II Investment Income**	**Page No.:**	**10, 13, 14 Investment Income 14, 15 Attachment B**
Topic:	**Investment Income**		
Sub Topic:	**Asset Liability Study Phase I Attachment B**		
Issue:	**Topic**		

Preamble: CAC observes, at page 10 in Investment Income, that MPI advises that the low forecast of investment income is "negatively impacted" by over $151 million in "losses in on the marketable bond portfolio" in the rating years "(2016/17 and 2017/18)". MPI also notes "that <u>marketable bond losses</u> from the rising interest rate forecast <u>are offset</u> by … the Corporation's matching program". [Emphasis added]

At page 13 in Investment Income, MPI advises that this "Pre-ALM scenario uses last year's asset allocation and last year's -1.0 year duration gap assumption". CAC is unclear as to whether the Post-ALM comparison values have a constant asset allocation.

Table 1.3.1 indicates a total for rating years "(2016/17 and 2017/18)" a net impact of $9.3 million, and compares that to a Pre-ALM net impact of $27.1 million, a difference of $17.8 million.

MPI notes in bold type on page 14 of Investment Income, that "By implementing the full duration matching strategy it reduced the impact of interest rates over the rating years on a corporate basis by approximately $8.9 million". A similar comment and analysis appear on the following page related to "Basic". [Emphasis added]

On pdf page 14 of the AON Hewett Phase I report, they observe that the "estimated annual tracking error" for a duration match was 120 bps, and for the Hybrid solution "duration buckets approach" the error was 60 bps.

On pdf page 15 of the AON Hewett Phase II report, they observe that the "risk reduction of the more precise matching strategies (Bucket approach …) is too small for the reduction in reward as a result of the lower yield"

Question:

a) Is the reference to $8.9 million on page 14 of Investment Income intended to indicate an annual average for a 2 year period, and if not, please provide the derivation of the amount?

b) What is the definition of "full duration matching strategy" as the phrase is used in this context?

c) What is the assumed asset allocation in the Post-ALM case?

d) What assumptions does the analysis in tables 1.3.1 and 1.3.2.1, incorporate with respect to:

i. Pre-ALM duration mismatch (and how does that assumption compare to the most recent value)

ii. Post-ALM mismatch, generally and specifically the use, if any, of the +/-0.25 duration bandwidth

iii. The right of the Corporation or ICWG to remove assets from the duration calculation

iv. The time lag from the identification of the duration target and the ability of the Corporation or ICWG to set an asset duration target differing from that derived from claims liability

v. Size of the marketable bond portfolio relative to the size of the claims liability portfolio.

vi. Non-linear changes in the interest rate curve.

vii. Periodic failures of the manager to remain within any bandwidth range as identified in various prior periods in CAC (MPI) 1-146 dated July 31, 2014.

viii. Weighting of fixed Income assets as a percentage of the Pre-ALM and Post-ALM portfolios.

ix. Portfolio turnover

x. The addition of new inflows during the period, which Aon indicated (Appendix B pdf page 44) should be excluded from its preferred benchmarking calculation.

e) If the "full duration matching strategy" does not does not include the "bucket approach" please recast tables 1.3.1 and 1.3.2.1 to reflect that approach and demonstrate the cost of the lower portfolio yield?

f) Does MPI accept the AON Hewett assumption of the "estimated annual tracking error" for a duration match was 120 bps, and for the Hybrid solution "duration buckets approach" the error was 60 bps, and if not what is the preferred assumption of as to the tracking error?

g) Please relate the concept of Aon Hewett's "risk reduction" from pdf page 15 of Part II, to the concept of "estimated annual tracking error" from pdf page 14 of the AON Hewett Phase I report.

h) In as much as the Bank interest rate forecasters upon whom MPI relies to develop its forecast have generally overstated the forecast increases in interest rates, please provide a sensitivity analysis to recast tables 1.3.1 and 1.3.2.1 to reflect interest rates increasing at 1/3 of the forecast rate used in the initial analysis.

Rationale for Question:
To understand the reliability of the analysis and its implication for the Corporation's risk.

CAC (MPI) 1-67

Volume:	**II Investment Income**	**Page No.:**	**20, 77, Investment Income 5, Attachment A**
Topic:	**Investment Income**		
Sub Topic:	**Investment Fund Strategy Statement INV 17** **Investment Policy Statement Attachment A**		
Issue:	**Bond Turnover in a less passive but more tightly matched environment**		

Preamble: INV.17 Appendix 5 notes a change in the Investment Fund Strategy Statement on page 77 to "The Fund's fixed income assets shall be primarily managed in a "buy and hold" strategy subject to change in the duration of the claims liabilities." [Emphasis added]

INV.17 Appendix 5 notes a change in the Investment Fund Strategy Statement on page 77 removing the word "passively" where it appeared before the phrase "managed in a buy and hold" strategy".

In the Investment Policy Statement, page 5, MPI provides a statement of investment beliefs. The beliefs included:

> "Asset allocation is the most important factor in determining the performance of the Fund"
>
> "The success of active management varies on the efficiency of capital markets."
>
> "In inefficient markets, active managers can add value net of fees"
> "In efficient markets … active managers will tend to underperform net of fees"
>
> "Passive management may be appropriate to reduce active management risk and cost in both efficient and some inefficient markets".

Table 3.3.1.2 provides the turnover ratio of Marketable Bonds for years ending between February 2008 and 2015, which average about 65% and imply that the total portfolio will be turned over on average in less than 1.8 years. CAC observes that these turnover statistics were derived from years when the allowable duration bandwidth was as much as 8 times greater [+/- 2.0 vs. +/- 0.25] than it will be following the implementation of the new Operational Asset Liability Management Policy on August 31, 2015. CAC also notes that the method of calculating duration also will be changed.

Question:

a) Please discuss the importance of the addition of the phrase "subject to change in the duration of the claims liabilities" in the Investment Fund Strategy Statement.

b) Does the addition of the phrase "subject to change in the duration of the claims liabilities" now indicate that trading will be less opportunistic and primarily driven by changes in the duration, within a narrower band, thereby resulting in a lower turnover?

c) Please discuss the importance of the deletion of the word "passively" in the Investment Fund Strategy Statement.

d) Does the deletion of the word "passively" now indicate a change in view as to the efficiency of the bond market?

e) Does the deletion of the word "passively" now indicate that trading will be more opportunistic thereby resulting in a higher turnover or "active management risk"?

f) Does the deletion of the word "passively" now indicate the existence of some factor which makes more active management of the Fixed Income portfolio more appropriate, and if so, what is the new factor?

g) Please discuss how the historic turnover ratio of the fixed income portfolio, while it was "passively managed in a buy and hold strategy", would compare to the turnover ratios of actively managed Canadian bond funds, such as the Fidelity Canadian Bond fund. http://www.fidelity.ca/cs/Satellite/doc/FICL_CBON_MRFPS.pdf

Rationale for Question:

CAC wishes to better understand that rationale for the assumption that bond turnover is forecast at 65% per year during the 5 year forecast, in light of the these changes in the Investment Fund Strategy. The questions go both to the reliability of forecasts and to the risks of the strategy.

CAC (MPI) 1-68

Volume:	**II Investment Income**	**Page No.:**	**4, 21** **Attachment B** **22, 35, 40** **Attachment C**
Topic:	**Investment Income**		
Sub Topic:	**Asset Liability Study Phase I Attachment B** **Asset Liability Study Phase II Attachment C**		
Issue:	**Topic**		

Preamble: On PDF page 4 of the Phase I report, AON Hewitt noted the current strategy using Macaulay duration and a "tolerance band is $\pm$1 year". CAC observes that Table 15.3, on page 74 of Investment Income, indicates:

> for quarters ended November 2013 and February 2014, a difference of -2.1 between Fixed Income Duration and Claims Duration,
>
> for the period May 2010 to November 2014, an average difference of -1.55 between Fixed Income Duration and Claims Duration.

On PDF page 21 of the Phase I report, and assuming that the "manager's capabilities are aligned satisfactorily", AON Hewitt observed that it favored a hybrid approach in which "key rates … are matched."

In Phase II of its report Aon Hewitt indicated:

> on pdf page 22, that in its modeling of the "Base Case" to represent a "status quo situation", it made mention of 2 exceptions including, "The Fixed Income Portfolio is assumed to follow a Bucket Approach to liability matching" and the use of the "Desired State rules".
>
> on pdf page 34, through the use of a graph the relative average net income and volatility of retained earnings for its "Base Case" and

certain other portfolio asset allocations, in which the fixed income portfolio was managed in three alternative strategies [*sic*]

on pdf page 35, that in its modeling "For allocations to fixed income from 30% to 70%, the best hedging strategy is Duration Matching".

on pdf page 40, that with respect to its recommendation of "the Duration Matching approach", the conclusion was "highly dependent on the assumed yield gain from using this approach over both the Bucket Approach and the Cash Flow Matching approach".

Question:

a) Please confirm that as the "Base Case" includes the bucket approach it is not perfectly representative of the results of current management of the debt portfolio, or if unable to confirm please explain why the confirmation is not possible.

b) Would MPI agree that the data point for the duration matching 60% debt case, on pdf page 35, is more representative of the recent handling of its debt portfolio than the 60% "Base Case" data point.

c) Please provide the assumption as to the "yield gain" accruing to the duration matching approach as opposed to the Bucket and the Cash Flow Matching approaches.

d) As the base case does not accurately represent the "status quo" as it incorporates a bucket approach, would we be correct in assuming that the "base case" would under-represent the annual income and retained earnings possible in a duration matching case with a +/- 1.0 bandwidth?

e) Would MPI agree that the 60% duration matching case data point on pdf page 34 would be the best representation of the status quo in the various Phase II report graphs?

f) Would MPI agree that the assumption of a ±1 year "tolerance band is" not supported by the behavior identified in Table 15.3 for quarters ended November 2013 and February 2014?

Rationale for Question:
CAC wishes to better understand that rationale for the assumption that bond turnover is forecast at 65% per year during the 5 year forecast, in light of the these changes in the Investment Fund Strategy. The questions go both to risks and to the reliability of the forecasts.

CAC (MPI) 1-69

Volume:	**I Overview** **II Investment Income**	**Page No.:**	**32, 33 Outlook** **15, 18 Attachment B** **125 Attachment C**
Topic:	**Investment Income**		
Sub Topic:	**I Asset Liability Study Phase I Attachment B** **Asset Liability Study Phase II Attachment C**		
Issue:	**Topic**		

Preamble: In the overview at pages 32 and 33, MPI discusses the impact of changes in matching duration and identifies differences in the range of $1.2 and $5.9 million. Other analysis appears in Table 1.3.1 in Investment Income.

In Phase II of its report, on pdf page 125, Aon Hewitt supplies a chart indicating the 10 year average basic net income for a 60% fixed income case with values calculated based on duration matching, bucket and cash flow matching approaches. The current state duration matching average basic net income in this analysis appears to be slightly over $80 million while the cash flow matching net income appears to be in the mid $60 million range.

In Phase I of its report, on pdf page 15, Aon Hewitt indicated that "the yield reduction to go from duration matching to cash flow matching is in the 40 to 50 bps range. CAC notes that the duration bandwidth is assumed to be +/- 1, so while the duration match will be less perfect than that under cash flow matching, there will still be substantial shelter for the portfolio from interest rate changes.

In Phase I of its report, on pdf page 18, Aon Hewitt indicated that "the marketable bonds portfolio had a value of approximately $1B".

In Phase I of its report, on pdf pages 58-60, Aon Hewitt provides expected returns and standard deviations for certain bond classes.

Question:
Please explain the rather substantial variance in average net income, relative to the comment on yield reduction and the expected returns as they may vary from time to time, the implications of those changing returns on market values during the forecast period.

Rationale for Question:
Understanding the validity of the two forecasts.

CAC (MPI) 1-70

Volume:	**II Investment Income**	**Page No.:**	**21 Attachment A**
Topic:	**Investment Income**		
Sub Topic:	**Investment Policy Statement, Attachment A**		
Issue:	**Topic**		

Preamble: In the Investment Policy Statement, March 2014, the Cash and Short Term asset allocations were Minimum 0%, Normal 1%, and Maximum 3%.

In the Investment Policy Statement, April 2015, the Cash and Short Term asset allocations are Minimum 0%, Normal 0%, and Maximum 5%, representing a reduction in the "Normal" value and an increase in the "Maximum" value.

Note 3 of the Annual Financial Statement AI.6 for February 2015 shows total investments of $2.151 billion of which the Cash and Short Term amount was $55 million or approximately 2.5%.

Note 5 of the Annual Report AI.6 for February 2015 shows total investments of $2.602 billion of which the Cash and Short Term amount was $69 million or approximately 2.6%. CAC estimates that with total investments of $2.602, the maximum allocation to this usually low return asset class could be as much as $130 million.

Question:

a) Please discuss the meaning of "Normal" in the context of the recent actual Cash and Short Term asset allocation of approximately 2.5% reflected in the financial statements, and the reduction of the "Normal" target from 1% to 0%.

b) In altering these two values, is MPI signaling that the "Normal" category is now largely irrelevant, perhaps because the rebalancing will be to the nearer of the Minimum or Maximum whichever may be closer?

c) Please discuss the rationale for increasing the Maximum allocation to Cash and Short Term at this time. Is this change motivated by anticipated transitional actions related to other asset allocation changes, past violations of the previous 3% Maximum (if so provide details thereof), or other matters?

Rationale for Question:

Understanding the implications of the new "Normal" and "Maximum" Cash and Short Term asset allocations, compared to current and recent actual Cash and Short term allocation, and the expectations that prompted MPI to alter these target levels. The questions go to the risks associated with the policy.

CAC (MPI) 1-71

Volume:	**II Investment Income**	**Page No.:**	**22, Oct report 4, Feb report**
Topic:	**Investment Income**		
Sub Topic:	**Investment Income Table 3.3.2.1 Duration Assumptions Claims Incurred, Assumed Claim Liability Duration**		
Issue:	**Starting point for the analysis**		

Preamble: While values for years 2015/16 through 2019/20 in the Assumed Claim Liability Duration table on page 9 of Claims Incurred, match the values of table 3.3.2.1 described as "Claims Duration with PfAD", the values for 2015, described as "actual" fail to match.

Question:
Please explain the difference in the values and the impact of the discontinuity on the analysis presented in the application.

Rationale for Question:
Understanding what may be a discontinuity in information presented in respect to duration.

CAC (MPI) 1-72

Volume:	**II Investment Income**	**Page No.:**	**23, Attachment A & 1, Attachment D**
Topic:	**Investment Income**		
Sub Topic:	**Investment Policy Statement Attachment A Operational Asset Liability Management Policy Attachment D**		
Issue:	**Asset Classes included in the duration matching**		

Preamble: In Section IV of the Operational Asset Liability Management Policy, effective August 31, 2015, MPI requires that the "ICWG will seek to minimize the difference between the market value of the duration matching portfolio and the present value of the claims liabilities". [Emphasis added]

In Section III of the Operational Asset Liability Management Policy, effective August 31, 2015, MPI defines the duration matching portfolio as including "marketable bonds and non-marketable bonds (MUSH bonds)", but makes no mention of Cash, Short Term instruments or floating rate notes.

In INV 3.3.2.1, on page 23 of Investment Income, beginning on line 10, we are told of the concept of "Fixed income duration" which is "the weighted average duration of cash, marketable bonds and MUSH bonds. As per section 8.4 of the Investment Policy Statement, the total fixed income duration is matched to the claims duration to minimize the interest rate risk of the Corporation". [Emphasis added]

In Section III of the Operational Asset Liability Management Policy, MPI requires that the "present value and duration of the claims liabilities will be determined by the actuarial department", but does not assign responsibility for determining "the market value" of marketable bonds and non-marketable bonds". [Emphasis added]

Question:

a) Please reconcile the comments quoted in the Preamble, and discuss the reasons why Cash and Short Term assets are apparently excluded from the matching process contemplated in Section III of the Operational Asset Liability Management Policy, but apparently included, at least in part with the use of the term "floating rate notes" in the matching of total fixed income duration contemplated by section 8.4 of the Investment Policy Statement.

b) Who will determine the "market value" of "non-marketable bonds, and in so doing what incremental discount will be applied to reflect the differing credit status, if any, of the issuer, any special terms in the trust indenture under which they were issued, and the illiquidity of the bond?

c) As it seeks to "minimize the difference between the market value of the duration matching portfolio and the present value of the claims liabilities" [Emphasis added] will ICWG also seek to insure that the "difference" will be due to the market value of the duration matching portfolio exceeding the present value of the claims liabilities, or will it be indifferent to whether the difference is positive or negative?

Rationale for Question:

Seeking to understand why there appear to be differences in asset classes described as being included in the matching exercise in the Operational Asset Liability Management Policy, and in the Investment Policy Statement.

CAC (MPI) 1-73

Volume:	**II Investment Income**	**Page No.:**	**6, 29, 30, Attachment B**
Topic:	**Investment Income**		
Sub Topic:	**Asset Liability Study Phase I Attachment B**		
Issue:	**Appropriate Discount Methodology**		

Preamble: Aon Hewitt was critical of MPI's discount methodologies in Appendix B to Phase I of its report. Aon Hewitt noted on pdf page 6 that the portfolio average yield was calculated as a mixture of 2 methods. Aon Hewitt proposed a duration weighted method on pdf pages 29 and 30 of Attachment B.

Question:

a) Does MPI accept the comments made by Aon Hewett, with respect to recursivity and the ability of portfolio changes impacting the yield without a duration change?

b) Has MPI adopted the AON Hewitt this recommendation, and if not why not?

Rationale for Question:

Seeking to understand the extent to which the Aon Hewett recommendations have been embraced. Questions go to risks of the policy and the reliability of forecast.

CMMG (MPI) 2016 GRA Information Requests

CMMG (MPI) 1-1

Question:
Please update last years CMMG (MPI) 1-1 to show comparison of projected vs. actual loss 2004 to 2015

Rationale for Question:
Reviewing accuracy of forecast

CMMG (MPI) 1-2

Question:
Please update last years CMMG (MPI) 1-4

Rationale for Question:
Reviewing loss distribution for anomalies and trends

CMMG (MPI) 1-3

Question:
Please update last years CMMG (MPI) 1-5

Rationale for Question:
Reviewing loss rate vs. rates approved

CMMG (MPI) 1-3b

Question:
Please summarize the final impact of rate change information contained in the Application to advise why the required rate decease for motorcycles was not applied for in this Application

Rationale for Question:
Review of capping of decrease is appropriate

CMMG (MPI) 1-4

Question:
What progress has MPI made in the last year to quantify its losses from distracted drivers? Does it have an estimate of its total claim costs per year attributable to distracted drivers

Rationale for Question:
Assist in valuating need for Road Safety Initiative for distracted drivers

CMMG (MPI) 1-5

Question:
Please provide budgeted amount for 2016 for motorcycle specific road safety progress and initiatives comparing same to overall road safety expenditures (relative % and amount with breakdowns of expenditures)

Rationale for Question:
Road Safety investment levels

CMMG (MPI) 1-6

Question:
Please provide the budget amounts for 2016 for wildlife collision reduction initiatives. Any new initiatives?

Rationale for Question:
Road Safety investment levels

CMMG (MPI) 1-7

Question:

Please update last years CMMG (MPI) 1-6

Rationale for Question:

Review wildlife collision losses

CMMG (MPI) 1-8

Question:

Please advise when the Corporation will have specific initiatives for (I) motorcycle and (ii) wildlife collision/road safety arising out of the Loss Prevention Strategy and Framework AI.13 Appendix. Please provide estimated roll out dates for implementation. Are there any other studies or reviews that provide such specifics that the Corporation can refer to?

Rationale for Question:

Road safety planning

CMMG (MPI) 1-9

Question:

When can we expect to see specific initiatives published as a result of the Road Safety Operational Plan 2014-17?

Rationale for Question:

Road safety planning

CMMG (MPI) 1-10

Question:
How can the Corporation demonstrate that its program outputs lead to desired outcomes in its Road Safety Operational Plan?

Rationale for Question:
Road safety planning

CMMG (MPI) 1-11

Question:
Has the Corporation made any use of the "Hot Spot Mapping" of motorcycle claims in Winnipeg? (ie. CMMG/MPI 1-9 last year)

Rationale for Question:
Road safety planning

CMMG (MPI) 1-12

Question:
Have selected numbers other than the expected loss ratio, (such as loss trend assumptions selected to loss frequency and severity) changed for motorcycles over the last decade?

Rationale for Question:
Rate Making Methodology

CMMG (MPI) 1-13

Question:
How does the Corporation reconcile its double-digit annual motorcycle rate increases prior to 2006/07 with the recent trend of decreases in required rate?

Rationale for Question:

Reasonableness of the rate making methodology for motorcycles

CMMG (MPI) 1-14

Question:

Please advise on the number of motorcyclists insured for 2012, 2013, 2014, 2015, and forecasted for 2016.

Rationale for Question:

Trends in vehicle population

CMMG (MPI) 1-15

Question:

Does the Corporation base the amount of its investment on road safety for motorcycle specific initiatives on the number of insured motorcyclists each year? If not, why not?

Rationale for Question:

Basis of investment in safety levels

CMMG (MPI) 1-16

Question:

Is the Corporation aware of any other insurer using 10 years of accident data equally weighted in its rate requirement methodology for motorcycle insurance?

Rationale for Question:

Role setting methodology. Is it standard?

CMMG (MPI) 1-17

Question:
Where does the Corporation store its hard copy files/data? What cost is associated with this?

Rationale for Question:
Cost control

CMMG (MPI) 1-18

Question:
What is the average cost of operating a claims centre? Has the Corporation examined the possibility of operating with fewer claims centres? Or specialized claim centres?

Rationale for Question:
Cost control

CMMG (MPI) 1-19

Question:
What percentage of damage evaluations are performed at the Plessis Road Centre vs.other claims centes?

Rationale for Question:
Cost control

PUB (MPI)

PUB (MPI) 1-1

Volume:	**I**	**Page No.:**	**OV, Pages 10-43**
Topic:	**Financial Overview**		
Sub Topic:			
Issue:	**Financial Information**		

Question:

Please file the Corporation's Board of Directors, Audit Committee and Investment committee working group meeting minutes that relate to:

a) Asset Liability Management

b) IT Optimization/BTO Projects;

c) RSR or Total Equity Targets/DCAT

d) Cost Containment; and

e) Approval of the 2016 GRA.

Rationale for Question:

To understand Corporate decisions that impact Basic.

RESPONSE:

a) to e)

Please see attached.

Budgeting & Operations Committee Report – Data Centre Global Resourcing Option	14-184	Moved by Mr. Paterson and seconded by Mr. Saunders that Members ratify the decision of the Budgeting & Operations Committee authorizing Management to enter into an agreement with IBM Canada Ltd. to implement Global Resourcing as agreed to in the Data Centre Optimization Statement of Work subject to the negotiation of satisfactory terms and conditions. CARRIED
Budgeting & Operations Committee Report – Sybase Contract Approval	14-186	Moved by Mr. Paterson and seconded by Ms. Johnson that Members ratify the decision of the Budgeting & Operations Committee approving: • Waiver of tender for the procurement of software license support and maintenance for Sybase software; and • A contract award to SAP Canada Inc. in the amount not to exceed $515,000 (plus applicable taxes). CARRIED
Corporate Sponsor-ships Cost Containment Strategy	14-202	Ms. Kempe presented Agenda Item 4.1 “Corporate Sponsorships Cost Containment Strategy”. In light of cost containment, the strategy was reviewed to reduce corporate sponsorship expenditures while still achieving the Corporation’s sponsorship objectives. Moved by Ms. Mintz and seconded by Mr. Donkervoort that the Members approve the cost containment strategy to reduce funding for corporate sponsorships by: • except for Arts and Culture, applying a 30% reduction to mid-range sponsorships, and • for Arts and Culture, continue the current practice of reviewing each application for opportunities to reduce total funding. CARRIED

Corporate Sponsorship Cost Containment Strategy Follow-Up	14-228	Ms. Kempe presented Agenda Item 5.2 “Corporate Sponsorship – Cost Containment Strategy Follow-Up”. Following discussion, Members received the report as information.

Physical Damage Centre of Excellence	14-238	Ms. Kempe presented Agenda Item 4.2 "Physical Damage Centre of Excellence". The framework for the Physical Damage Centre of Excellence includes sustainable trades development training ($325,500), standards and estimatics ($45,000 annual), quality assurance (to be determined), and research and development ($440,000). Additionally, the construction of a new facility is $4.1 million plus contingency. Moved by Ms. MacKinnon and seconded by Ms. Johnson that the Members approve the proposed Physical Damage Centre of Excellence initiative with funding of $6.3 million. CARRIED
Physical Damage Re-engineering Program Principles	14-239	Ms. Kempe presented Agenda Item 5.1 "Physical Damage Re-engineering Program Principles". Following discussion, Members received the report as information.

Budgeting & Operations Committee Report – Corporate Strategic Initiatives and Enterprise Systems Support Contracts – 2015/16	15-015	Moved by Mr. Saunders and seconded by Ms. Johnson that the Members ratify the decision of the Budgeting & Operations Committee: • Approving the Corporate Strategic Initiatives for 2015/16 for an amount up to $31.67 million (the majority to be allocated to HP, IBM, Mitchell, and FINEOS according to the terms of contracts). • Authorizing management to engage IBM for the support and operation of the data centre at a cost not to exceed $8.25 million in 2015/16. [redacted] CARRIED
Investment Committee Report	15-028	The Board discussed the Asset Liability Management Study and indicated its support for the recommendations. Moved by Ms. Johnson and seconded by Ms. Millis that the Members accept the report of the Investment Committee as presented. CARRIED Ms. Kempe and Ms. Leppky joined the meeting.

Transfer to Basic Rate Stabilization Reserve	15-042	Ms. Campbell presented Agenda Item 4.1 “Transfer to Basic Rate Stabilization Reserve”. Moved by Ms. Millis and seconded by Mr. Saunders that the Members approve the transfer of sufficient funds from the Non-Basic Retained Earnings to the Basic Rate Stabilization Reserve to meet its minimum RSR target of $213 million based on Total Equity (subject to the exact amount transferred being approved by the Board). CARRIED

Investment Committee Report – Investment Policy Statement	15-085	Moved by Ms. Johnson and seconded by Ms. Millis that the Members ratify the decision of the Investment Committee authorizing Management to recommend to the Minister of Finance the Investment Policy Statement. CARRIED
President & CEO's Report (Continued)	15-089	Mr. Guimond continued presenting Agenda 3.1 "President & CEO's Report" providing a report on the following: • [redacted] • Cost Containment in the Corporation [redacted] [redacted] [redacted]
2016/17 Basic Autopac Program & Rates	15-090	Mr. Johnston presented Agenda Item 4.1 "2016/17 Basic Autopac Program & Rates". The forecast net income is $14.9 million in 2015/16, ($11.4 million) in 2016/17, and $12.5 million in 2017/18. The ALM strategy of dollar matching of fixed income and claims liabilities is to be implemented and there is to be no RSR Rebuilding Fee. Moved by Mr. Saunders and seconded by Ms. Millis that the Members approve the application to the Public Utilities Board for an overall 0.0% rate change for 2016/17 Basic Autopac rates. CARRIED

President & CEO's Report	15-108	Mr. Guimond presented Agenda Item 3.1 "President & CEO's Report" providing a report on the following items: [redacted] Ms. Reichert joined the meeting to discuss cost containment.
2016/17 Basic Autopac Program & Rates	15-110	Mr. Johnston presented Agenda Item 4.2 "2016/17 Basic Autopac Program & Rates". Moved by Ms. Johnson and seconded by Ms. MacKinnon that the Members approve: **A. RATE CHANGES** The application to the Public Utilities Board for 2016/17 rates for the Basic Autopac Program as set out below: 1. Classification and experience rate adjustments which result in an overall 0.0% increase to average rates for Basic Autopac written premiums. 2. Rates for individual risk classifications to be adjusted based on statistically determined experience indicators. 3. Classification changes to be implemented on a revenue neutral basis. CARRIED Moved by Mr. Donkervoort and seconded by Ms. Mintz that the Members approve: **B. CLASSIFICATION CHANGES** The following classification changes to the Basic Autopac program as of March 1, 2016 for Vehicle Rating Factors: 1. Revisions to the relationship between rates and rate group (Rate Line) for passenger vehicles, light trucks, motor homes, motorcycles, heavy trucks, trailers (over $2,500) and buses. 2. Adjustments to passenger vehicle and light truck rate groups based on the Canadian Loss Experience Automobile Rating (CLEAR) indicators, as provided by the Insurance Bureau of Canada (IBC). Adjustments will consist of an increase of one rate group for vehicles requiring an increase, and a decrease to the required CLEAR indicator for vehicles requiring a decrease. 3. Passenger vehicle and light truck rate group methodology changes: • Revision of the CLEAR Collision/Comprehensive weighting from 81/19 to 83/17.

		4. Annual adjustment to heavy truck rate tables. 5. Motorcycle body style corrections as provided by the Insurance Bureau of Canada. CARRIED
Transfer to Basic Rate Stabilization Reserve	15-111	Ms. Kalinowsky presented Agenda Item 4.3 “Transfer to Basic Rate Stabilization Reserve”. Moved by Mr. Saunders and seconded by Ms. Millis that the Members approve the transfer of $75.5 million, effective February 28, 2015, from Extension Retained Earnings to the Basic Rate Stabilization Reserve to meets its minimum RSR target of $213 million based on total equity. CARRIED [redacted]
Cisco Contract Approval	15-114	Mr. Guimond presented Agenda Item 4.6 “Cisco Contract Approval”. Moved by Ms. MacKinnon and seconded by Ms. Millis that the Members approve waive of tender to allow Management to enter into a 3 year contract commencing July 2015 with Cisco Systems Canada Co. to provide support and maintenance for Cisco hardware and software in an amount not to exceed $960,000 (plus applicable taxes) over the 3 year period. CARRIED

Reichert, Ms. Campbell, and Ms. Kalinowsky rejoined the meeting.

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Dynamic Capital Adequacy Test Update – Basic Autopac

Ms. Reichert presented Agenda Item C.5 "Dynamic Capital Adequacy Test Update – Basic Autopac". Following discussion, Members received the report as information.

[redacted]

Investment Committee Working Group

May 28, 2014 at 11:30 a.m. to 1:30 p.m.
MPI Large Meeting Room A

In Attendance:
G. Bunston
C. Campbell
G. Gibson
D. Guimond
B. Hagan
L. Péloquin
H. Reichert
W. Sprenger
G. Steski
S. Wiebe

Regrets
D. Dunstone

MEETING MINUTES

1. [redacted]

[redacted]

2. Asset Liability Management Study RFP

The Working Group discussed the rationale for choosing Aon as the ALM consultant. The Working Group requested some edits to the assessment of the RFP vendors in the submitted document. Subject to these requested changes, the Working Group approved Aon as the ALM consultant.

3. [redacted]

[redacted]

Investment Committee Working Group

September 15, 2014, 8:30 a.m.
MPI Large Meeting Room A

In Attendance:
G. Bunston
C. Campbell
D. Dunstone
G. Gibson
D. Guimond
B. Hagan
H. Reichert
W. Sprenger
S. Wiebe

Regrets
L. Péloquin
G. Steski

MEETING MINUTES

1. Asset Liability Management Study – Phase 1

Three Aon Representatives attended the meeting. Julianna Spiropoulos attended in person, John Myrah and Jocelyn Guerin attended via conference call. Luke Johnston, MPI's Chief Actuary, attended for the duration of the presentation.

Ms. Spiropoulos presented the Phase One Analysis of the Interest Rate Risk Hedging Strategy. The Working Group asked various questions during the hour long presentation. After the presentation was completed, the ICWG agreed to discuss this report internally at a later date.

[redacted]

[redacted]

[redacted]

Investment Committee Working Group

October 8, 2014, 10:00 a.m.
MPI Large Meeting Room A

In Attendance:
G. Bunston
D. Dunstone
D. Guimond
B. Hagan
H. Reichert
W. Sprenger
G. Steski
S. Wiebe

Regrets
C. Campbell
L. Péloquin

MEETING MINUTES

1) ALM Study Phase 1 Discussion

The Working Group discussed the internally prepared summary of the ALM Study Phase 1 report. Luke Johnston, Chief Actuary was in attendance during the meeting. The Working Group agreed that the duration matching by buckets hybrid approach would be used as the base scenario in the ALM Phase 2 analysis. The Working Group also approved two other recommendations from the paper. First, the Working Group agreed to include the MfAD (Margin for Adverse Deviation) when hedging the liabilities. Second, the Working Group agreed to calculate the duration weighted average yield on a bond per bond basis.

The Working Group discussed the collaboration required with the Department of Finance in order to operate the new interest rate risk strategy. The Working Group also discussed benchmarking issues.

2) [redacted]

[redacted]

3) ALM Study Phase 2 Discussion

The Working Group discussed the upcoming Phase 2 analysis. The Working Group agreed on three items. First, the Working Group agreed to request Aon Hewitt to provide a first draft of the asset allocation analysis. Second, all asset classes except hedge funds would be modeled in the first draft of the asset allocation analysis. Finally, the Working Group accepted the Capital Assumptions and Methodology provided in the appendix of the Phase 1 report.

4) [redacted]

5) [redacted]

[redacted]

Next Meeting – December 17, 2014

Investment Committee Working Group

December 17, 2014, 8:30 a.m.
MPI Large Meeting Room A

In Attendance:
G. Bunston
C. Campbell
D. Dunstone
L. Péloquin
H. Reichert
W. Sprenger
G. Steski
S. Wiebe

Regrets
D. Guimond

MEETING MINUTES

[redacted]

[redacted]

2. ALM Study Phase 2 Report – Part A: Optimization – by phone

Two Aon Hewitt representatives presented the ALM Study Phase 2 Report – Part A on Optimization. Julianna Spiropoulos attended in person and Jocelyn Guerin attended by phone. The consultant changed their recommended interest rate risk hedging strategy from a hybrid bucketing approach (from the Phase 1 report) to a perfect duration matching strategy. Aon discussed their methodology for the asset mix optimization, and the rationale for their selected portfolio allocation. The ICWG provided Aon guidance on what material to present to the Investment Committee.

After the Aon representatives left the meeting, the Working Group approved the recommendation to use perfect duration matching for the interest rate risk hedging and Aon's recommended asset mix, which consisted of 70% fixed income, 15% equities and 15% alternatives. The Working Group discussed implementing the perfect duration strategy by the end of Q2 2015/16. The Investment Department will draft an operational ALM policy for perfect duration matching for the next ICWG meeting based on direction discussed at the meeting.

[redacted]

3. ALM Study Phase 2 Report – Part B: Implementation Discussion

The ALM Study Phase 2 Report Part B on Implementation was provided as information. This report provided analysis and recommendations on ALM implementation topics: asset class ranges, corporate bond allocations, style investing and alternative indexing, withdrawal policies, and an Investment Policy Statement review. These topics will require discussion at later meetings, as required.

[redacted]. [redacted]

[redacted]

[redacted] [redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

b) Asset Liability Management Policy

The draft ALM policy was presented to the ICWG. The Working Group accepted the policy. This policy will go to the Investment Committee at the April 10th IC meeting for information.

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

PUB (MPI) 1-2

Volume:	**I**	**Page No.:**	**OV.3, Page 9**
Topic:	**Basic Financial Statement**		
Sub Topic:			
Issue:	**Interest Rate Margin for Adverse Deviation**		

Preamble: MPI reports in its first quarter report that the interest rate margin for adverse deviation (MFAD) is decreased from 100 basis points to 75 basis points, i.e., a decrease of 25 basis points. This decrease is to reflect the low discount rate used in the valuation of claim liabilities. This adjustment was made to avoid a negative discount rate.

AON in its ALM Study has identified that MPI may want to review the 1% margin and consider basing the margins on a concept similar to the Minimum Capital Test.

Question:

a) Please explain how MPI supported the change from 1% margin for adverse to .75% and the analysis to further reduce the margin to .5%.

b) Please provide MPI's position relative to assessing the level of the margin based on the recommendation made by AON.

RESPONSE:

a) As stated above, the Corporation’s Basic claims liabilities were calculated using an investment return margin of 1.00% as of February 2014. Actuarial standards of practice in Canada require a minimum investment return margin of 0.25%. The Corporation’s previous margin of 1.00% was selected based on the judgment of the Appointed Actuary and the Corporation’s Chief Actuary. As at February 2014, there was still significant mismatch risk between assets and liabilities, with asset duration at approximately 80% of claims duration. Also, Basic claims liabilities had (and continue to have) a long claims settlement pattern, resulting in timing risk. Finally, there is a small amount of credit risk related to Corporate and non-marketable bonds. These three factors led to the selection of the 1.00% margin.

In February 2015 the Corporation had discussions with the Appointed Actuary in regards to the level of the interest rate margin relative to the average yield of the assets supporting the claims liabilities. As of February 2015, the claims liability discount rate was 2.92% nominal and 0.90% real. Applying the 1.00% margin to the real discount rate would result in a negative discount rate with margin. The Corporation recommended to the Appointed Actuary that the margin be lowered by 0.25% because of the negative real discount rate and because the level of the margin was 111% of the real discount rate, which was not seen as a reasonable risk load given the current level of interest rates.

In the Corporation’s 2015/16 forecast the assumption was made that the investment margin would be reduced by a further 0.25% in the October 2015 Appointed Actuary’s report. Since this change occurs in the future, the Appointed Actuary has not yet signed off on the reduction in the margin. However, given that the Corporation’s forecast was prepared on the assumption that there will be near-perfect duration and dollar matching of claims liabilities and supporting assets, then there must, all else equal, be a reduction in risk (and hence the required investment margin). The Corporation’s view in making the forecast was that it would be unreasonable to forecast a significant reduction in asset and liability mismatch risk without assuming that the investment risk margin would be reduced. The forecasted investment margin of 0.50% reflects the minimum risk margin of 0.25% along with an assumed load for mismatch risk, timing risk, and credit risk, all of which are considered to be minor risks. The risk margin continues to be set based on judgment.

b) In regards to the comments made in the AON report (Vol II Investment Income Attachment B PDF page 26), the Corporation was in agreement with AON that the investment return margin should be reviewed given the implementation of the revised Asset and Liability Management program. The Corporation has reviewed and modified the investment return margin as described in part (a). A Minimum Capital Test based margin setting methodology was not researched or utilized by the Corporation in the latest actuarial valuation. The Corporation will have further discussions on the investment return margin with the Appointed Actuary during the October 2015 valuation.

PUB (MPI) 1-3

Volume:	**I**	**Page No.:**	**RSF.3, Pages 17-18**
Topic:	**Rate Setting Framework**		
Sub Topic:	**Break-Even Rates**		
Issue:	**Requested Rate**		

Preamble: "Since approximately half of the 2016/17 policies are earned in the 2016/17 fiscal year and the remainder are earned in the 2017/18 fiscal year, the Corporation takes the average net income of the 2016/17 and 2017/18 *fiscal years* to estimate the average 2016/17 *policy year* net income."

Question:

a) How does this approach of averaging the net income of the 2016/17 and 2017/18 fiscal years account for:

- The rate level adequacy of policy years 2015/16 and 2017/18 being different from that of policy year 2016/17; and
- The influence of the next GRA on fiscal year 2017/18 rate level adequacy.

b) Please provide a five year comparative history showing the average of two successive fiscal years and the related policy year, with respect to:

- Total Earned Revenues; and
- Net Claims Incurred.

Rationale for Question:

To assess the reasonableness of the Corporation's break-even metric.

RESPONSE:

a) The intent of ratemaking is to determine rates for a group of policies for a particular policy period such that the premiums collected will be sufficient to cover the overall expected costs arising from these policies. Based on the current ratemaking methodology as presented in Vol II Ratemaking and because of staggered renewals, the expected costs for policies issued for policy year 2016/17 is assumed as the average of the projected costs for fiscal years 2016/17 and 2017/18.

Having established that, the rate level adequacy of policy years 2015/16 and 2017/18 is irrelevant since it does not relate to the expected costs associated with policy year 2016/17. Further, in respect of policy year 2015/16, the rate level is already set and the Corporation, historically, has not changed the rate level mid-year. Any deficiency/excess resulting from the difference in premiums and expected cost for the policy year (and all other prior policy years) is addressed through the rate stabilization reserves. Also, because the rate level for policy year 2017/18 is not yet determined, the rate level is irrelevant to rates for policy year 2016/17.

Similarly, the rate level adequacy for policy year 2016/17 is irrelevant to that for policy year 2017/18 as this will be determined by the expected costs for policies issued in policy year 2017/18.

b)

Comparison of Actual versus Forecast

Fiscal Year	Actual	Actual Average	Forecast Fisc Yr	Forecast Fisc Yr + 1	Forecast Average	Actual less Forecast
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Net Claims Incurred						
10/11	333,071	472,554	626,896	649,594	638,245	-165,691**
11/12	612,037	636,663	647,040	672,045	659,543	-22,880
12/13	661,288	704,362	610,344	633,421	621,883	82,479
13/14	747,435	746,636	638,142	661,812	649,977	96,659
14/15	745,837	667,369	644,705	659,848	652,277	15,092
15/16*	588,900					
Motor Vehicles Earned Premiums						
10/11	728,893	738,921	730,283	762,190	746,237	-7,316
11/12	748,948	744,299	746,293	768,097	757,195	-12,896
12/13	739,650	740,364	728,343	735,988	732,166	8,198
13/14	741,077	757,931	746,870	779,557	763,214	-5,283
14/15	774,785	801,460	779,648	816,976	798,312	3,148
15/16*	828,135					
Total Earned Revenue						
10/11	768,276	774,345	770,055	793,508	781,782	-7,437
11/12	780,413	777,808	777,946	806,492	792,219	-14,411
12/13	775,203	780,128	766,479	785,731	776,105	4,023
13/14	785,053	804,205	793,247	833,214	813,231	-9,026
14/15	823,357	853,400	830,812	873,652	852,232	1,168
15/16*	883,443					

Notes:
*Forecasted per the 2016 GRA
**2010/11 was the year of the significant rebate in excess of $250M.
(3): Average of two successive years
(4) & (5): Per the respective GRA e.g. for fiscal year 2014/15, from the 2014 GRA
(6) = [(4) + (5)] / 2
(7) = (3) - (6)

PUB (MPI) 1-4

Volume:	I	Page No.:	813, Page 12
Topic:	Claims Management		
Sub Topic:			
Issue:	813		

Question:

Please provide the revenue/cost consequences related to the implementation of the 23 recommendations made by the Auditor General.

Rationale for Question:

To understand how MPI has addressed the recommendations in the Value for Money Audit of PIPP.

RESPONSE:

The direct cost or revenue associated with the implementation of the 23 recommendations is minimal and based on the following:

- Nine recommendations were already contemplated and implemented via the BI^3 Initiative and Mediation Pilot prior to the audit report being issued
- Three studies were conducted by internal staff
- Two legislative amendments were enacted with an estimated maximum combined cost not to exceed $251,000 per insurance loss year
    - Amendment clarifying the definition of a motor vehicle for PIPP coverage.
    - Amendment providing indexation provisions for annual maximum entitlement for Critical Care Allowance, Grief Counseling, Medical

Report Reimbursement for Claimants Involved in Review and Appeal, and Clothing Allowance.

- Nine remaining recommendations were procedural changes

PUB (MPI) 1-5

Volume:	**II**	**Page No.:**	**PF.4, Pages 6-7**
Topic:	**Pro Formas**		
Sub Topic:	**2014/15 Financial Results**		
Issue:	**Forecasting**		

Preamble: At the 2015 GRA, MPI provided an updated forecast for 2014/15 based on MPI Exhibit 10 PUB/MPI Pre-Ask 5, which indicated lower forecast interest rates than used in the application. MPI forecasted a net loss of $82.5 million for 2014/15, a deterioration from the forecast presented in the application, due to interest rates being lower than forecast.

MPI stated in its closing arguments:

> "In a rising interest rate environment, the monies gained from the lower cost of claims more than offsets -- offsets the decreases in the bond portfolio. Thus, the financial results will be better. If interest rates decrease, the Corporation's financial results are worse. Unfortunately, currently we are in a falling interest rate environment." [T 2188 2015 GRA]

In this application, MPI has indicated that interest rates had declined from what was forecast, yet the Corporation earned a net income of $2.4 million, not a net loss of $82.5 million or worse.

Question:

a) Please provide an update to PUB/MPI Pre-Ask 5(a) attachment, adding an additional column for actual and updated interest forecast included in this application. Provide a comparison between the Pre-Ask 5(a) with the actual and revised forecast for the current year. Please update OV.3 Pages 7-9 and PF.4 pages 6-7.

b) Please provide an updated comparison of 2015 GRA, adding a column in the middle of the current analysis reflecting PUB/MPI Pre-Ask 5, provide a comparison between the results in that column with actual results, and explain all differences.

c) Please indicate what assumptions were changed in preparing the Pre-Ask 5 forecast run.

Rationale for Question:

Financial Forecast accuracy is important in assessing how future updates should be assessed.

RESPONSE:

a) Please see the attached table. The last part of the question requests an update of "Vol I Overview OV.3 Pages 7-9 and Vol II Pro Formas PF.4 pages 6-7", which requires further clarification. These two sections compare last year's financial forecast for 2014/15 (2015 GRA) to the actual results for fiscal 2014/15, neither of which can be updated with current interest rates.

b) Please see the attached comparative of the 2014/15 Statement of Operations for Pre Ask 5 actual along with explanations of differences. As per the attached comparative, there were significant favourable variances in 2014/15 that were unrelated to the movement of interest rates. A summary of the key impacts to the 2014/15 financial results relative to the 2015 GRA forecast is also summarized on page 8 of the Overview section.

c) No assumptions were changed for 2015 GRA PUB (MPI) Pre-Ask 5 forecast run except for the updated Government of Canada 10-year bond forecast to October 2014.

Government of Canada 10-Year Bond Rate Forecast

Calendar Year	Calendar Quarter	Applied to MPI Fiscal Quarter	BMO NB July 2015	CIBC July 2015	Global July 2015	RBC July 2015	Scotia June 2015	TD July 2015	July 2015 Forecast	March 2015 Forecast (Used in 2016 GRA)	Difference	Actual	October 2014 Standard (Average)	March 2014 Standard (Used in 2015 GRA)	Difference
2014	Q1	Q1 2014/15										2.25%	2.25%	2.62%	-0.37%
	Q2	Q2 2014/15										2.00%	2.00%	2.81%	-0.81%
	Q3	Q3 2014/15										1.86%	2.17%	2.98%	-0.81%
	Q4	Q4 2014/15										1.30%	2.39%	3.14%	-0.74%
2015	Q1	Q1 2015/16							1.62%	1.47%	0.15%	1.62%	2.25%	2.62%	-0.37%
	Q2	Q2 2015/16	1.64%	1.75%	1.68%	1.68%	1.80%	1.77%	1.72%	1.70%	0.02%		2.00%	2.81%	-0.81%
	Q3	Q3 2015/16	1.67%	1.90%	1.85%	1.80%	1.90%	1.90%	1.84%	1.87%	-0.03%		1.55%	2.98%	-1.43%
	Q4	Q4 2015/16	1.79%	2.10%	2.02%	2.10%	1.95%	1.95%	1.99%	2.04%	-0.06%		1.66%	3.14%	-1.48%
2016	Q1	Q1 2016/17	1.90%	2.00%	2.24%	2.30%	2.15%	2.05%	2.11%	2.21%	-0.11%		1.79%	3.28%	-1.49%
	Q2	Q2 2016/17	1.98%	2.15%	2.46%	2.50%	2.25%	2.20%	2.26%	2.40%	-0.15%		1.91%	3.42%	-1.51%
	Q3	Q3 2016/17	2.07%	2.55%	2.62%	2.70%	2.35%	2.30%	2.43%	2.57%	-0.14%		2.04%	3.57%	-1.54%
	Q4	Q4 2016/17	2.17%	2.65%	2.76%	2.90%	2.45%	2.40%	2.56%	2.70%	-0.14%		2.14%	3.71%	-1.57%
2017	Q1	Q1 2017/18			2.92%				2.92%	3.22%	-0.30%		1.95%	3.70%	-1.76%
	Q2	Q2 2017/18			3.17%				3.17%	3.41%	-0.24%		2.11%	3.83%	-1.72%
	Q3	Q3 2017/18			3.33%				3.33%	3.52%	-0.19%		2.22%	3.97%	-1.75%
	Q4	Q4 2017/18			3.54%				3.54%	3.55%	-0.01%		2.36%	4.12%	-1.76%
2018	Q1	Q1 2018/19			3.60%				3.60%	3.55%	0.05%		2.40%	4.32%	-1.92%
	Q2	Q2 2018/19			3.60%				3.60%	3.55%	0.05%		2.40%	4.50%	-2.10%
	Q3	Q3 2018/19			3.60%				3.60%	3.55%	0.05%		2.40%	4.62%	-2.22%
	Q4	Q4 2018/19			3.60%				3.60%	3.55%	0.05%		2.40%	4.62%	-2.22%
2019	Q1	Q1 2019/20			3.60%				3.60%	3.55%	0.05%		2.40%	4.62%	-2.22%
	Q2	Q1 2019/20			3.60%				3.60%	3.55%	0.05%		2.40%	4.62%	-2.22%
	Q3	Q1 2019/20			3.60%				3.60%	3.55%	0.05%		2.40%	4.62%	-2.22%
	Q4	Q1 2019/20			3.60%				3.60%	3.55%	0.05%		2.40%	4.62%	-2.22%

Data sources dates:

BMO NB as of July 10, 2015 (Average of Period)
CIBC as of July 13, 2015 (Average of Period)
Global Insight, July 2015
RBC as of July 8, 2015 (End of Period)
Scotiabank as of June 26, 2015 (End of Period)
TD as of June 18, 2015 (End of Period)

Manitoba Public Insurance
Statement of Operations - 2014/15 Pre Ask 5 vs Actual Comparative

(C$ 000s, except where noted)	a 2015 GRA 2015B	b 2015 GRA 2015B Pre-Ask 5	c 2016 GRA 2015A	d=c-b Increase / (Decrease)		e Increase / (Decrease)
	$		$			%
Net Premiums Written						
Motor Vehicles	795,233	795,233	794,052	(1,181)		(0.15)
Drivers	46,992	46,992	44,642	(2,350)		(5.00)
Reinsurance Ceded	(13,661)	(13,661)	(13,829)	(168)		1.23
Total Net Premiums Written	**828,564**	**828,564**	**824,865**	**(3,699)**	**(1)**	(0.45)
Net Premiums Earned						
Motor Vehicles	769,872	769,872	774,785	4,914		0.64
Drivers	44,330	44,330	42,926	(1,404)		(3.17)
Reinsurance Ceded	(13,722)	(13,722)	(13,829)	(107)		0.78
Total Net Premiums Earned	**800,480**	**800,480**	**803,882**	**3,402**		0.42
Service Fees & Other Revenues	19,799	19,799	19,475	(324)		(1.64)
Total Earned Revenues	**820,279**	**820,279**	**823,357**	**3,079**		0.38
				-		
Net Claims Incurred	624,776	714,747	745,837	31,090	**(2)**	4.35
Claims Expense	116,250	116,249	116,578	328	**(4)**	0.28
Road Safety/Loss Prevention	11,350	11,350	11,359	9	**(4)**	0.08
Total Claims Costs	**752,376**	**842,346**	**873,774**	**31,427**		3.73
				-		
Expenses				-		
Operating	73,568	73,568	74,283	715	**(4)**	0.97
Commissions	33,496	33,496	32,845	(651)		(1.94)
Premium Taxes	24,426	24,426	24,531	105		0.43
Regulatory/Appeal	3,261	3,261	3,935	674	**(4)**	20.67
Total Expenses	**134,751**	**134,751**	**135,594**	**842**		0.63
				-		
Underwriting Income (Loss)	**(66,848)**	**(156,819)**	**(186,011)**	**(29,192)**		18.62
				-		
Investment Income	28,807	74,356	188,451	114,095	**(3)**	153.44
				-		
Net Income (Loss) from Operations	**(38,041)**	**(82,463)**	**2,440**	**84,903**		(102.96)
Allocated from Property		-	-	-		
Net Income (Loss)	**(38,041)**	**(82,463)**	**2,440**	**84,903**		(102.96)

Explanation of Significant Variances - 2014/15 Comparative

Ref.	Category	(C$ 000s)	Explanation
(1)	Net Premiums Written	828,564	2015 GRA - Pre Ask 5
		(1,399)	Lower forecasted vehicle volume and upgrade
		218	Lower forecasted fleet rebate
		(2,350)	Lower forecasted DSR premium impact
		(168)	Higher forecasted Reinsurance written
		824,865	2016 GRA
(2)	Net Claims Incurred	717,747	2015 GRA - Pre Ask 5
		(40,641)	Lower than budgeted Physical Damage claims
		(26,800)	Reduction in interest rate provision
		10,704	Other changes including ULAE/ILAE/ and DPAC/Premium Deficiency
		84,827	Higher than budgeted PIPP claims due to lower interest rates
		745,837	2016 GRA
(3)	Investment Income	74,356	2015 GRA - Pre Ask 5
		105,988	Higher than budgeted bond gains due to lower interest rates
		10,075	Higher than budgeted interest yield / Dividend income / equity gains
		(1,281)	Lower than budgeted rental income
		(687)	Lower than budgeted Management fees and pension expense
		188,451	2016 GRA

*detailed explanations along with commentary found in Volume II-Investments

Ref.	Category	(C$ 000s)	Explanation
(4)	Allocated Corporate Expenses (Normal Operations)	196,245	2015 GRA - Pre Ask 5
		571	Higher than budgeted Salaries
		906	Higher than budgeted Merchant Fees
		1,714	Higher than budgeted amortization of deferred development
		(352)	Lower than budgeted Overtime/benefits/H&E tax
		(240)	other
		198,847	2016 GRA
(4)	Allocated Corporate Expenses (Initiatives Implementation)	5,460	2015 GRA - Pre Ask 5
		(719)	Lower than budgeted salaries and overtime
		723	Higher data processing expenses than budgeted
		(84)	other
		5,380	2016 GRA
(4)	Allocated Corporate Expenses (Initiatives Ongoing)	2,721	2015 GRA - Pre Ask 5
		(153)	Lower data processing expenses than budgeted
		(640)	Lower depreciation on capital projects
		1,928	2016 GRA

*detailed explanations along with commentary found in Volume II-Expenses

PUB (MPI) 1-6

Volume:	II	Page No.:	RM.4.3, Pages 31-32
Topic:	Ratemaking		
Sub Topic:	Major Classification Required Rates		
Issue:	Requested Rate		

Preamble: For almost all major classes and coverages, the derivation of the Major Classification required rates uses the five most recent years of experience. Three exceptions are noted where the ten most recent years of experience are used to "better smooth out the larger volatility in the data", as follows:

- Motorcycles - Accident Benefits - Other and Income Replacement Indemnity;
- Serious Losses for Accident Benefits - Other (Indexed) and Income Replacement Indemnity; and
- ORVs - Bodily Injury and Property Damage.

Question:

Please provide a comparative analysis of historical experience to justify these exceptions from the Corporation's standard approach of using the five most recent years of experience.

Rationale for Question:

To assess fairness in rating.

RESPONSE:

Refer to the attached tables which compare the pure premiums based on a 5-year average and on a 10-year average of actual pure premiums.

In most cases, the year-over-year change in the 10-year average is smaller and more gradual than the corresponding change in the 5-year average. For example, with Serious Losses for Private Passenger, the 10-year average for Accident Benefits - IRI slowly declines from $39.24 to $34.10 compared to the 5-year average which declines from $45.19 to $25.09. A similar situation is observed for Accident Benefits - Other (Indexed). As another example, for the Motorcycles major class, the 10-year average for Accident Benefits – Total exhibits a more stable pattern than the 5-year average.

In respect of ratemaking, the smaller and more gradual change exhibited by the 10-year average is preferable as this prevents rate shocks and significant rate dislocations.

Serious Losses - Adjusted Pure Premiums

	Private Passenger					
	Accident Benefits - Other (Indexed)			Accident Benefits - IRI		
Accident Year	Ratemaking Exhibit VI	5-Year Average	10-Year Average	Ratemaking Exhibit VI	5-Year Average	10-Year Average
01/02	30.07			27.59		
02/03	30.76			39.63		
03/04	34.59			38.04		
04/05	45.09			28.80		
05/06	27.35	33.57		32.41	33.29	
06/07	40.66	35.69		53.78	38.53	
07/08	51.66	39.87		50.67	40.74	
08/09	31.57	39.27		46.62	42.46	
09/10	20.93	34.43		32.03	43.10	
10/11	30.14	34.99	34.28	42.84	45.19	39.24
11/12	24.35	31.73	33.71	27.42	39.92	39.22
12/13	19.72	25.34	32.61	22.08	34.20	37.47
13/14	12.01	21.43	30.35	14.55	27.79	35.12
14/15	8.97	19.04	26.74	18.57	25.09	34.10

	Commercial					
	Accident Benefits - Other (Indexed)			Accident Benefits - IRI		
Accident Year	Ratemaking Exhibit VI	5-Year Average	10-Year Average	Ratemaking Exhibit VI	5-Year Average	10-Year Average
01/02	154.51			71.39		
02/03	82.75			38.63		
03/04	28.37			50.94		
04/05	46.27			35.03		
05/06	19.20	66.22		46.69	48.54	
06/07	6.91	36.70		53.13	44.88	
07/08	42.04	28.56		97.12	56.58	
08/09	87.29	40.34		71.73	60.74	
09/10	12.91	33.67		27.21	59.17	
10/11	6.61	31.15	48.69	20.69	53.97	51.26
11/12	37.20	37.21	36.96	36.18	50.58	47.73
12/13	25.72	33.95	31.25	93.65	49.89	53.24
13/14	60.74	28.64	34.49	48.96	45.33	53.04
14/15	7.40	27.53	30.60	19.51	43.79	51.48

Serious Losses - Adjusted Pure Premiums (cont'd)

Public

	Accident Benefits - Other (Indexed)			Accident Benefits - IRI		
Accident Year	Ratemaking Exhibit VI	5-Year Average	10-Year Average	Ratemaking Exhibit VI	5-Year Average	10-Year Average
01/02	28.96			19.06		
02/03	13.83			21.50		
03/04	18.40			103.90		
04/05	1.16			36.27		
05/06	24.57	17.38		46.44	45.43	
06/07	4.57	12.51		23.11	46.24	
07/08	50.72	19.88		181.60	78.26	
08/09	33.92	22.99		125.97	82.68	
09/10	109.52	44.66		56.44	86.71	
10/11	23.86	44.52	30.95	23.78	82.18	63.81
11/12	10.74	45.75	29.13	20.59	81.67	63.96
12/13	186.14	72.84	46.36	77.02	60.76	69.51
13/14	0.00	66.05	44.52	0.00	35.57	59.12
14/15	76.30	59.41	52.03	51.18	34.51	60.61

Motorcycles

	Accident Benefits - Other (Indexed)			Accident Benefits - IRI		
Accident Year	Ratemaking Exhibit VI	5-Year Average	10-Year Average	Ratemaking Exhibit VI	5-Year Average	10-Year Average
01/02	101.96			150.80		
02/03	47.04			202.79		
03/04	43.88			16.96		
04/05	10.57			204.68		
05/06	88.39	58.37		119.59	138.96	
06/07	422.20	122.41		307.10	170.22	
07/08	106.08	134.22		123.07	154.28	
08/09	33.03	132.05		256.82	202.25	
09/10	52.99	140.54		158.84	193.08	
10/11	246.91	172.24	115.30	179.33	205.03	172.00
11/12	41.91	96.18	109.30	15.72	146.75	158.49
12/13	1.19	75.20	104.71	32.43	128.63	141.45
13/14	134.17	95.43	113.74	187.54	114.77	158.51
14/15	42.63	93.36	116.95	59.84	94.97	144.03

Major Class 4 - Motorcycles - Adjusted Pure Premiums

	Accident Benefits - Other (Indexed)			Accident Benefits - Other (Non-Ind)		
Accident Year	Ratemaking Exhibit VI	5-Year Average	10-Year Average	Ratemaking Exhibit VI	5-Year Average	10-Year Average
01/02	58.74			158.82		
02/03	50.53			196.34		
03/04	79.06			185.25		
04/05	43.57			107.87		
05/06	50.44	56.47		246.01	178.86	
06/07	77.53	60.23		229.79	193.05	
07/08	75.68	65.26		178.54	189.49	
08/09	64.89	62.42		125.74	177.59	
09/10	83.54	70.41		159.81	187.98	
10/11	123.71	85.07	70.77	215.57	181.89	180.37
11/12	73.60	84.28	72.25	127.83	161.50	177.27
12/13	87.54	86.66	75.96	118.85	149.56	169.52
13/14	135.50	100.78	81.60	158.71	156.15	166.87
14/15	99.38	103.95	87.18	88.21	141.83	164.91

	Accident Benefits - IRI			Accident Benefits - Total		
Accident Year	Ratemaking Exhibit VI	5-Year Average	10-Year Average	Total	5-Year Average	10-Year Average
01/02	106.75			324.31		
02/03	92.51			339.38		
03/04	122.78			387.08		
04/05	47.40			198.84		
05/06	98.97	93.68		395.41	329.00	
06/07	123.38	97.01		430.69	350.28	
07/08	130.36	104.58		384.58	359.32	
08/09	133.88	106.80		324.51	346.81	
09/10	110.18	119.35		353.53	377.75	
10/11	187.71	137.10	115.39	527.00	404.06	366.53
11/12	115.29	135.49	116.25	316.72	381.27	365.77
12/13	78.42	125.10	114.84	284.81	361.31	360.32
13/14	162.46	130.81	118.80	456.67	387.74	367.28
14/15	199.43	148.66	134.01	387.02	394.44	386.09

Major Class 6 - ORV - Adjusted Pure Premiums

	Bodily Injury			Property Damage		
Accident Year	Ratemaking Exhibit VI	5-Year Average	10-Year Average	Ratemaking Exhibit VI	5-Year Average	10-Year Average
01/02	23.83			2.17		
02/03	19.33			1.45		
03/04	3.50			1.70		
04/05	5.35			1.31		
05/06	8.29	12.06		1.89	1.70	
06/07	8.10	8.91		1.65	1.60	
07/08	0.20	5.09		1.56	1.62	
08/09	3.13	5.01		1.75	1.63	
09/10	0.04	3.95		1.11	1.59	
10/11	16.93	5.68	8.87	1.47	1.51	1.60
11/12	8.03	5.67	7.29	0.91	1.36	1.48
12/13	1.55	5.94	5.51	1.54	1.36	1.49
13/14	1.40	5.59	5.30	0.91	1.19	1.41
14/15	19.41	9.46	6.71	0.78	1.12	1.36

PUB (MPI) 1-7

Volume:	**II**	**Page No.:**	**RM Appendix H, Pages 1-2**
Topic:	**Ratemaking**		
Sub Topic:	**Changes in Methodologies and Assumptions**		
Issue:	**Requested Rate and Forecasting Accuracy**		

Question:

Please provide an analysis of the impact of each of the noted changes in methodologies or assumptions summarized in Ratemaking Appendix H.

Rationale for Question:

To provide context for the assessment of the reasonableness of the changes in methodologies or assumptions.

RESPONSE:

Refer to the following table.

Ratemaking: Impact of Methodology and Assumption Changes

Description	Priv Pass	Comm	Public	Motorcycle	Trailer	ORV
	Major Class					
Starting Figures - Prior to Any Changes						
Credibility Weighted Required Rate	1,035.95	708.50	1,906.29	778.77	66.46	9.56
Credibility Weighted Required Rate Change	-0.2%	3.8%	6.8%	-6.6%	-3.0%	-18.9%
Change: Overall Indicated Pure Premium Trends for Collision, Comprehensive and Property Damage						
Credibility Weighted Required Rate	1,035.44	712.34	1,919.66	780.23	66.59	9.61
Impact of Change*	-0.51	3.84	13.37	1.46	0.13	0.05
Credibility Weighted Required Rate Change	-0.2%	4.4%	7.6%	-6.4%	-2.8%	-18.5%
Impact of Change*	0.0%	0.6%	0.7%	0.2%	0.2%	0.4%
Change: Selected Pure Premium Trends for Collision, Comprehensive and Property Damage by Major Class						
Credibility Weighted Required Rate	1,035.68	712.37	1,920.04	767.55	66.59	9.61
Impact of Change*	0.24	0.04	0.38	-12.69	0.00	0.00
Credibility Weighted Required Rate Change	-0.2%	4.4%	7.6%	-7.9%	-2.8%	-18.5%
Impact of Change*	0.0%	0.0%	0.0%	-1.5%	0.0%	0.0%
Change: Selected Pure Premium Trends for Property Damage by Major Class						
Credibility Weighted Required Rate	1,035.67	712.35	1,920.05	767.55	66.59	9.63
Impact of Change*	0.00	-0.02	0.01	0.00	0.00	0.02
Credibility Weighted Required Rate Change	-0.2%	4.4%	7.6%	-7.9%	-2.8%	-18.3%
Impact of Change*	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Change: Weighting Ratio for Collision for the Private Passenger Major Class						
Credibility Weighted Required Rate	1,036.55	705.48	1,897.53	765.65	66.33	9.63
Impact of Change*	0.87	-6.87	-22.52	-1.90	-0.26	0.00
Credibility Weighted Required Rate Change	-0.1%	3.4%	6.3%	-8.2%	-3.2%	-18.3%
Impact of Change*	0.1%	-1.0%	-1.3%	-0.2%	-0.4%	0.0%
2016 General Rate Application - After All Changes						
Credibility Weighted Required Rate	1,036.55	705.48	1,897.53	765.65	66.33	9.63
Impact of All Changes	0.60	-3.02	-8.76	-13.12	-0.13	0.07
Credibility Weighted Required Rate Change	-0.1%	3.4%	6.3%	-8.2%	-3.2%	-18.3%
Impact of All Changes	0.1%	-0.4%	-0.5%	-1.6%	-0.2%	0.6%

*Reflects the difference between the current figures and the figures from the prior change

PUB (MPI) 1-8

Volume:	II	Page No.:	RM Appendix G, Page 1
Topic:	Ratemaking		
Sub Topic:	Upgrade Factors and Drift		
Issue:	Requested Rate and Forecasting Accuracy		

Preamble: MFR.40

Question:

a) Please provide a comparative table showing annual drift assumptions by Major Class and overall from this year's GRA (Appendix G, Row [9]) and the corresponding values from last year's GRA, with accompanying commentary on any significant differences.

b) Please discuss the inherent differences between the assumed annual Total Upgrade Factor (ranging between 2.40% and 2.84% from REV.1.2, Page 8) and the assumed annual Overall Drift Factor (4.42%).

RESPONSE:

a) Refer to the attached table.

Significant differences are observed for the Commercial and Public major classes, which are mainly attributable to changes in the selected drifts. The selected drifts by respective major classes are based on the historical drifts. The table below presents the historical drifts for the Commercial and Public major classes, as well as the basis of the selected drifts for the 2016 General Rate Application.

Major Class	Commercial	Public
08/09	3.12%	0.53%
09/10	0.73%	1.70%
10/11	1.93%	-0.82%
11/12	1.94%	1.07%
12/13	1.70%	0.71%
13/14	1.15%	0.17%
14/15	2.34%	0.31%
5-Year Average	1.81%	0.29%
5-Year Hi-Lo Average	**1.86%**	**0.40%**

A significant difference is also observed in the overall drift factor. The overall drift factor is calculated based on the assumed drift and volume growth by major class applied to an initial population of vehicles. The main driver of the difference is a small shift in the composition of vehicles from non-HTA units to HTA units when compared to the 2015 General Rate Application. This has the effect of "bumping up" the overall average rate, and therefore the overall drift factor, since the premiums for HTA units are significantly higher.

b) The Upgrade Factors presented in Vol II REV.1.2 page 8 represent the forecasted annual upgrade factors for HTA units only. This is different from the Overall Drift Factor of 4.42% presented in RM, Appendix G in two ways. First, the Overall Drift Factor is for all units rather than HTA units only. Second, the Overall Drift Factor is for the 28-month period from October 31, 2014 to March 1, 2017, rather than an annual upgrade factor. The connection between the Upgrade Factors and the Overall Drift Factor is presented in RM, Appendix G, specifically rows 15 and after, and note [i].

Drift Calculation by Major Class

Row	Description	Notes	Overall	Major Class Priv Pass	Comm	Public	Motorcycle	Trailer	ORV
2015 General Rate Application									
[1]	Projected Drift	[a]	3.81%	6.29%	4.01%	1.52%	2.11%	5.21%	0.00%
[2]	Selected Drift	[b]		2.65%	1.70%	0.65%	0.90%	2.20%	0.00%
2016 General Rate Application									
[3]	Projected Drift	[c]	4.42%	6.29%	4.54%	0.91%	2.03%	5.17%	0.00%
[4]	2014/15 Actual Drift	[b]		2.63%	2.34%	0.31%	0.65%	2.08%	0.00%
[5]	2015/16 Selected Drift	[b]		2.65%	1.85%	0.40%	0.90%	2.20%	0.00%
[6]	2016/17 Selected Drift	[b]		2.65%	1.85%	0.40%	0.90%	2.20%	0.00%
Change in Projected Drift			0.61%	-0.01%	0.52%	-0.62%	-0.08%	-0.04%	0.00%

Notes:

[a] = (1 + [2]) ^ (28/12) - 1; trended from October 31, 2013 to March 1, 2016; Overall calculated

[b] Selected based on historical drift for each major class

[c] = ((1 + [4]) ^ (4/12) * (1 + [5]) * (1 + [6]))- 1; trended from October 31, 2014 to March 1, 2017; Overall calculated

PUB (MPI) 1-9

Volume:	**II**	**Page No.:**	**RM.5.3, Pages 45-46**
Topic:	**Ratemaking**		
Sub Topic:	**Special Adjustments**		
Issue:	**Requested Rate**		

Preamble: "The Corporation uses relative ranking rules to ensure that less restrictive rating categories do not have lower rates than more restrictive ones, resulting in special rate adjustments."

In all but one instance, the rate for one rating category is increased to the rate for another rating category.

Question:
What is the justification for moving the rate of one rating category to the rate of the other rating category, rather than moving the rates for both rating categories to a common weighted average rate?

Rationale for Question:
To assess fairness in rating.

RESPONSE:
Experience adjustments for all rating categories are determined consistently using a relativity approach, which is derived based on actual loss experience. This approach is documented in Vol II RM.4.4 and RM.5. Because this approach is applied consistently to all rating categories, it does not account for special situations, specifically the relative ranking rules. Rather than adjusting the rates for two rating categories, the current methodology uses the determined experience adjustment for the significantly larger rating category, ensuring that rates are adequate and actuarially sound for this category, and makes a special adjustment to the smaller rating category.

The table below compares the "pairs" of rating categories.

Vehicle Description	Number of Vehicles	
	Adjusted Category	Adjusted to Category
Territory 5 rates increased to equal Territory 2 rates:		
• All Purpose Motorcycle – Other, 501 cc to 1,000 cc	25	103
• All Purpose Motorcycle – Other, greater than 1,000 cc	53	215
• All Purpose Motorcycle – Touring, 500 cc or less	1	6
• All Purpose Motorcycle – Touring, greater than 1,000 cc	52	148
• All Purpose Motorcycle – Sport-Touring, 500 cc or less	1	0
Pleasure Motorcycle – Sport-Touring, Territory 3 – 501 cc to 1,000 cc rates increased to equal 500 cc or less rates	5	0
Pleasure Motorhome, Territory 4 rates decreased to be $2.00 less then All Purpose Motorhome, Territory 4 rates	86	0
Common Carrier Local Passenger Vehicle, Territory 2 rates increased to equal All Purpose Passenger Vehicle, Territory 2 rates	230	91,343
Total Number of Vehicles	**453**	**91,815**

PUB (MPI) 1-10

Volume:	**II**	**Page No.:**	**RM.5.2, Page 44**
Topic:	**Ratemaking**		
Sub Topic:	**Exceptions**		
Issue:	**Requested Rate**		

Question:

Please provide specific rationale justifying each of the cited exceptions.

Rationale for Question:

To assess fairness in rating.

RESPONSE:

The rationale for each cited exception has been provided by the Corporation on the page referenced above.

PUB (MPI) 1-11

Volume:	**II**	**Page No.:**	**RM, Exhibit V, Pages 1-2**
Topic:	**Ratemaking**		
Sub Topic:	**Pure Premium Trends**		
Issue:	**Forecasting Accuracy**		

Question:

a) Please provide the rationale for the upward bias introduced by rounding selected annual trends up to the nearest 0.25%.

b) Please provide the rationale for the upward bias introduced by imposing a minimum annual trend of 0%.

c) Please discuss what considerations other than the R2 statistic led to the selection of the annual pure premium trends that show a relatively poor R2 statistic.

Rationale for Question:

To assess forecasting accuracy.

RESPONSE:

a) The proposed rounding up to the nearest 0.25% was judgment. The impact of rounding up as opposed to rounding down is minimal as shown in the table below.

	Priv Pass	Comm	Public	Motorcycle	Trailer	ORV
Rounding Up						
Credibility Weighted Required Rate	1,036.55	705.48	1,897.53	765.65	66.33	9.63
Credibility Weighted Required Rate Change	-0.1%	3.4%	6.3%	-8.2%	-3.2%	-18.3%
Rounding Down						
Credibility Weighted Required Rate	1,036.66	704.67	1,895.00	765.13	66.31	9.61
Credibility Weighted Required Rate Change	-0.1%	3.3%	6.2%	-8.2%	-3.3%	-18.4%
Variance						
Credibility Weighted Required Rate	0.11	-0.81	-2.53	-0.52	-0.02	-0.02
Credibility Weighted Required Rate Change	0.0%	-0.1%	-0.1%	-0.1%	0.0%	-0.1%

From an overall claims cost perspective, there is no upward bias. Per Vol II Ratemaking page 33, "*…the total claims from the six major classes will not equal the overall claims costs. …the [major classes'] pure premiums… were balanced to the overall pure premium on a pro-rata basis to account for this discrepancy.*" There is simply a minimal redistribution of claims costs between major classes per the table above.

b) The minimum annual trend of 0% was judgment, and reflects a prudent assumption that pure premiums are generally constant or increasing i.e. claims costs increase either at the same pace or faster than the growth in units. Refer also the response to (a) above.

c) The R2 statistic was relevant (in the methodology) only when deciding between using a shorter or longer term trend, and deciding between using the overall or major class trend e.g. in the case of Collision and Property Damage. Apart from that, because of the need to select a trend, we've decided to select a trend solely based on the available data, even where the R2 statistic was low. The selected trends were checked to ensure that they are reasonable.

PUB (MPI) 1-12

Volume:	II	Page No.:	REV. 1, Pages 4-5
Topic:	Motor Vehicle Premiums		
Sub Topic:	Written Premium Forecast		
Issue:	Requested Rate		

Question:

Please reconcile the formula shown for deriving the Written Premium Forecast (Page 4) with the actual derivation of the written and earned premium forecasts (Page 5).

Rationale for Question:

To assess forecasting accuracy.

RESPONSE:

The formula referenced on REV 1, pages 4-5 is as follows:

Current Year's Written Premium Forecast =
Previous Year's Written Premium
x (1+ Volume Factor)
x (1+ Upgrade Factor)
x (1+ Rate Change)
- Net Fleet Rebates
- Anti-Theft Discounts

The Corporation has identified that this formula needs to be restated as shown below. Changes are identified in **bold.** The Corporation was already applying the volume, upgrade, and rate changes to the previous year's written premium *before rebates*; however, the formula on REV 1, page 4 was missing this wording.

Current Year's Written Premium Forecast =
Previous Year's Written Premium ***Before Rebates***
x (1+ Volume Factor)
x (1+ Upgrade Factor)
x (1+ Rate Change)
- Net Fleet Rebates
- Anti-Theft Discounts

Based on the restated formula, the calculation for the 2015/16 written premium is as follows (these figures can be found on REV 1, page 5):

2015/16 Written Premium Forecast =
811,948 x (1.0175) x (1.0240) x (1.0340) – 15,052 – 4,910 = 854,786

The 2015/16 written premiums calculated above ($854,787,000) do not equal the figure shown on REV 1, page 5 ($854,303,000). The reason for the $484,000 difference is that the impact of the 2015/16 rate change is currently calculated *excluding* the assumed volume increase. [See REV 1, page 5 "Impact of Rate Change (Excludes Volume Increase)"]. This calculation was questioned after the 2016 Application had been filed. The Corporation reviewed the methodology and concluded that it was not appropriate. The correct formula should be based on the restated formula shown above. Therefore, the correct 2015/16 written premium should be 854,303,000. The Corporation will make this change in next year's financial model.

Since there are no rate changes proposed in 2016/17 and thereafter there are no further impacts from this correction other than to carry forward the understated revenues of $484,000 throughout the forecast. The differences between the original and the revised written premium forecast are shown below. These differences are not considered material to the rate indication, and therefore, do not change the Corporation's proposed 2016/17 rate change of 0.0%.

	Written Premium Forecast ($000)		
Fiscal Year	**Original Forecast**	**Revised Forecast**	**Difference**
2015/16	854,303	854,787	483
2016/17	893,543	894,048	505
2017/18	935,826	936,355	528
2018/19	978,889	979,442	552
2019/20	1,024,366	1,024,944	577

PUB (MPI) 1-13

Volume:	**II**	**Page No.:**	**REV.1.1, REV.1.2, Pages 6-11**
Topic:	**Motor Vehicle Premiums**		
Sub Topic:			
Issue:	**Volume and Upgrade Factors**		

Question:

a) Please provide a restated PF.1, PF.2 and PF.3, and R.1 pages 5 and 6 "Motor Vehicle Premiums Written and Earned," to reflect a volume factor of 2.0% throughout the forecast period.

b) Please provide a restated PF.1, PF.2 and PF.3, and R.1 pages 5 and 6 "Motor Vehicle Premiums Written and Earned," to reflect an upgrade factor of 2.95% throughout the forecast period.

Rationale for Question:

To test the forecast sensitivity to changes in the volume and upgrade factor.

RESPONSE:

a) Please see attached.

b) Please see attached.

Manitoba Public Insurance
Multi-year - Statement of Operations
For the Years Ended February,

2.0 % volume increase throughout the forecast period

(C$ 000s, except where noted)	*For the Years Ended February,*					
	2015A	2016P	2017P	2018P	2019P	2020P
BASIC						
Motor Vehicles	794,052	856,384	897,967	942,816	988,668	1,037,185
Drivers	44,642	48,269	51,128	54,021	56,626	59,164
Reinsurance Ceded	(13,829)	(12,396)	(12,644)	(12,897)	(13,155)	(13,418)
Total Net Premiums Written	**824,865**	**892,257**	**936,451**	**983,939**	**1,032,140**	**1,082,931**
Net Premiums Earned						
Motor Vehicles	774,785	829,256	878,797	922,140	967,530	1,014,819
Drivers	42,926	46,782	49,704	52,580	55,329	57,900
Reinsurance Ceded	(13,829)	(12,396)	(12,644)	(12,897)	(13,155)	(13,418)
Total Net Premiums Earned	**803,883**	**863,641**	**915,857**	**961,824**	**1,009,704**	**1,059,301**
Service Fees & Other Revenues	19,475	20,922	22,362	24,079	26,008	28,186
Total Earned Revenues	**823,357**	**884,564**	**938,220**	**985,902**	**1,035,712**	**1,087,488**
Net Claims Incurred	745,837	588,912	677,122	691,577	823,478	862,042
Claims Expense	116,578	121,045	128,107	131,338	136,816	136,659
Road Safety/Loss Prevention	11,359	11,496	11,444	10,551	11,404	11,427
Total Claims Costs	**873,774**	**721,452**	**816,674**	**833,466**	**971,699**	**1,010,129**
Expenses						
Operating	74,283	71,401	74,643	77,218	80,043	80,552
Commissions	32,845	35,434	36,875	37,470	39,247	41,087
Premium Taxes	24,531	26,281	27,855	29,242	30,686	32,182
Regulatory/Appeal	3,935	3,154	3,210	3,273	3,338	3,404
Total Expenses	**135,595**	**136,270**	**142,582**	**147,202**	**153,313**	**157,224**
Underwriting Income (Loss)	**(186,011)**	**26,841**	**(21,036)**	**5,234**	**(89,300)**	**(79,865)**
Investment Income	188,451	(10,887)	12,688	12,739	100,678	108,686
Net Income (Loss) from Operations	**2,440**	**15,954**	**(8,348)**	**17,973**	**11,378**	**28,821**

Note: Rounding may affect totals

Manitoba Public Insurance
Multi-year - Statement of Financial Position

2.0 % volume increase throughout the forecast period

(C$ 000s, except where noted)	*For the Years Ended February,*					
	2015A	2016P	2017P	2018P	2019P	2020P
BASIC						
Assets						
Cash and investments	1,593,442	1,557,794	1,547,510	1,548,429	1,629,810	1,721,701
Equity investments	598,842	615,079	627,300	637,692	669,326	704,692
Investment property	35,073	35,091	34,930	33,828	32,462	31,171
Due from other insurance companies	108	-	-	-	-	-
Accounts receivable	273,197	270,837	283,261	296,227	309,246	322,936
Prepaid expenses	-	291	291	291	291	291
Deferred policy acquisition costs	-	-	-	-	-	-
Reinsurers' share of unearned premiums	-	-	-	-	-	-
Reinsurers' share of unearned claims	2,565	-	-	-	-	-
Property and equipment	90,474	87,247	91,067	91,553	90,273	88,648
Deferred development costs	56,992	66,092	73,175	81,730	86,029	97,255
	2,650,693	**2,632,430**	**2,657,533**	**2,689,749**	**2,817,435**	**2,966,693**
Liabilities						
Due to other insurance companies	-	1	1	1	1	1
Accounts payable and accrued liabilites	34,157	38,064	39,810	41,632	43,462	45,386
Financing lease obligation	3,224	2,955	2,892	2,825	2,753	2,681
Unearned premiums and fees	426,137	462,716	486,724	512,523	538,931	566,846
Provision for employee current benefits	16,240	16,253	16,880	17,520	18,175	18,845
Provision for employee future benefits	286,581	289,816	303,510	318,434	334,015	350,309
Provision for unpaid claims	1,671,275	1,588,331	1,576,083	1,542,667	1,605,262	1,668,799
	2,437,614	**2,398,136**	**2,425,900**	**2,435,602**	**2,542,598**	**2,652,867**
Equity						
Retained earnings						
Basic Insurance Retained Earnings						
Rate Stabilization Reserve	165,600	178,700	185,423	197,000	206,600	216,700
Retained Earnings	12,217	15,071	-	6,396	8,174	26,895
	177,817	193,771	185,423	203,396	214,774	243,595
	99,878	62,771	59,474	84,282	118,899	155,015
Accumulated Other Comprehensive Income	35,262	40,523	46,210	50,751	60,063	70,231
Total Equity	**213,079**	**234,294**	**231,633**	**254,147**	**274,837**	**313,825**
	2,650,693	2,632,430	2,657,533	2,689,749	2,817,435	2,966,693

Note: Rounding may affect totals

Manitoba Public Insurance
Multi-Year - Statement of Changes in Equity

2.0 % volume increase throughout the forecast period

	2015A	2016P	2017P	2018P	2019P	2020P
RATE STABILIZATION RESERVE (RSR)						
Basic Insurance Rate Stabilization Reserve						
Beginning Balance	99,877	165,600	178,700	185,423	197,000	206,600
Transfer from Basic Retained Earnings	65,723	13,100	6,723	11,577	9,600	10,100
Ending Balance	**165,600**	**178,700**	**185,423**	**197,000**	**206,600**	**216,700**
Retained Earnings						
Beginning Balance	-	12,217	15,071	-	6,396	8,174
Net Income (Loss) from annual operations	2,440	15,954	(8,348)	17,973	11,378	28,821
Transfer from Non Basic Retained Earnings	75,500					
Retained Earnings Prior to Transfers	77,940	28,171	6,723	17,973	17,774	36,995
Transfer to Rate Stabilization Reserve	(65,723)	(13,100)	(6,723)	(11,577)	(9,600)	(10,100)
Balance of Fund	**12,217**	**15,071**	**-**	**6,396**	**8,174**	**26,895**
Total Basic Retained Earnings	**$ 177,817**	**$ 193,771**	**$ 185,423**	**$ 203,396**	**$ 214,774**	**$ 243,595**
Total Accumulated Other Comprehensive Income	**$ 35,262**	**$ 40,523**	**$ 46,210**	**$ 50,751**	**$ 60,063**	**$ 70,231**
Total Equity	**$ 213,079**	**$ 234,294**	**$ 231,633**	**$ 254,147**	**$ 274,837**	**$ 313,825**

Minimum RSR based on PUB rules	82,900	89,500	93,900	98,700	103,500	108,600
Maximum RSR based on PUB rules	165,600	178,700	187,500	197,000	206,600	216,700
MPI Total Equity Target	213,000	213,000	213,000	213,000	213,000	213,000
MPI Max Target (MCT)	325,000	325,000	325,000	325,000	325,000	325,000

Manitoba Public Insurance
Premiums Written and Earned

2.0 % volume increase throughout the forecast period

(C$ 000s, except where noted)

	2015A	2016P	2017P	2018P	2019P	2020P
BASIC						
Volume Change	1.82%	2.00%	2.00%	2.00%	2.00%	2.00%
Upgrading & Other Changes	2.72%	2.40%	2.70%	2.84%	2.73%	2.78%
Rate Change	0.90%	3.40%	0.00%	0.00%	0.00%	0.00%
Premiums Unearned during Year	46.30%	46.10%	46.10%	46.10%	46.10%	46.10%
Last Year Premiums Written	772,268	811,948	876,345	918,007	962,960	1,009,033
Volume Increase	14,055	16,239	17,527	18,360	19,259	20,181
Total Volume Written	786,323	828,187	893,872	936,367	982,219	1,029,214
Upgrading & Other Changes	21,388	19,876	24,135	26,593	26,815	28,612
Total With Upgrading	807,711	848,063	918,007	962,960	1,009,033	1,057,826
Impact of Rate Change (Excludes Volume Increases)	7,143	28,282	0	0	0	0
Adjustments	(2,906)	0	0	0	0	0
Total Premium Written Before Rebates	**811,948**	**876,345**	**918,007**	**962,960**	**1,009,033**	**1,057,826**
Fleet Rebates	(13,435)	(15,052)	(15,713)	(16,407)	(17,126)	(17,879)
Initiatives & Other Charges	(4,461)	(4,910)	(4,327)	(3,737)	(3,239)	(2,762)
Total Premiums Written	**794,052**	**856,384**	**897,967**	**942,816**	**988,668**	**1,037,185**
Reinsurance Ceded	(13,829)	(12,396)	(12,644)	(12,897)	(13,155)	(13,418)
Total Net Premiums Written	**780,223**	**843,988**	**885,323**	**929,919**	**975,513**	**1,023,768**
Beginning Unearned Premium Balance	348,398	367,665	394,793	413,963	434,638	455,776
Premiums Written	794,052	856,384	897,967	942,816	988,668	1,037,185
Unearned Premiums during Year	367,665	394,793	413,963	434,638	455,776	478,142
Premiums Earned	**774,785**	**829,256**	**878,797**	**922,140**	**967,530**	**1,014,819**
Reinsurance Ceded	(13,829)	(12,396)	(12,644)	(12,897)	(13,155)	(13,418)
Total Net Premiums Earned	**760,956**	**816,860**	**866,153**	**909,243**	**954,375**	**1,001,401**

Note: Rounding may affect totals

Manitoba Public Insurance
Multi-year - Statement of Operations
For the Years Ended February,

2.95 % upgrade increase throughout the forecast period

(C$ 000s, except where noted)	For the Years Ended February,					
	2015A	2016P	2017P	2018P	2019P	2020P
BASIC						
Motor Vehicles	794,052	859,002	900,688	944,334	989,941	1,037,671
Drivers	44,642	48,269	51,128	54,021	56,626	59,164
Reinsurance Ceded	(13,829)	(12,396)	(12,644)	(12,897)	(13,155)	(13,418)
Total Net Premiums Written	**824,865**	**894,875**	**939,173**	**985,458**	**1,033,412**	**1,083,417**
Net Premiums Earned						
Motor Vehicles	774,785	830,667	881,471	924,213	968,916	1,015,668
Drivers	42,926	46,782	49,704	52,580	55,329	57,900
Reinsurance Ceded	(13,829)	(12,396)	(12,644)	(12,897)	(13,155)	(13,418)
Total Net Premiums Earned	**803,883**	**865,053**	**918,531**	**963,897**	**1,011,090**	**1,060,150**
Service Fees & Other Revenues	19,475	20,922	22,377	24,095	26,017	28,194
Total Earned Revenues	**823,357**	**885,975**	**940,909**	**987,992**	**1,037,107**	**1,088,344**
Net Claims Incurred	745,837	588,926	677,100	691,490	823,454	862,026
Claims Expense	116,578	121,045	128,107	131,338	136,816	136,659
Road Safety/Loss Prevention	11,359	11,496	11,444	10,551	11,404	11,427
Total Claims Costs	**873,774**	**721,467**	**816,651**	**833,379**	**971,675**	**1,010,112**
Expenses						
Operating	74,283	71,401	74,643	77,218	80,043	80,552
Commissions	32,845	35,471	36,961	37,541	39,293	41,117
Premium Taxes	24,531	26,323	27,935	29,304	30,727	32,207
Regulatory/Appeal	3,935	3,154	3,210	3,273	3,338	3,404
Total Expenses	**135,595**	**136,349**	**142,749**	**147,336**	**153,400**	**157,280**
Underwriting Income (Loss)	**(186,011)**	**28,159**	**(18,491)**	**7,277**	**(87,968)**	**(79,047)**
Investment Income	188,451	(10,959)	12,600	12,627	100,835	108,984
Net Income (Loss) from Operations	**2,440**	**17,200**	**(5,891)**	**19,904**	**12,867**	**29,936**

Note: Rounding may affect totals

Manitoba Public Insurance
Multi-year - Statement of Financial Position

2.95 % upgrade increase throughout the forecast period

(C$ 000s, except where noted)	*For the Years Ended February,*					
	2015A	**2016P**	**2017P**	**2018P**	**2019P**	**2020P**
BASIC						
Assets						
Cash and investments	1,593,442	1,559,210	1,551,045	1,553,223	1,635,781	1,728,421
Equity investments	598,842	615,651	628,292	639,030	670,986	706,552
Investment property	35,073	35,100	34,947	33,848	32,484	31,193
Due from other insurance companies	108	-	-	-	-	-
Accounts receivable	273,197	271,471	283,920	296,594	309,554	323,054
Prepaid expenses	-	291	291	291	291	291
Deferred policy acquisition costs	-	-	-	-	-	-
Reinsurers' share of unearned premiums	-	-	-	-	-	-
Reinsurers' share of unearned claims	2,565	-	-	-	-	-
Property and equipment	90,474	87,247	91,067	91,553	90,273	88,648
Deferred development costs	56,992	66,092	73,175	81,730	86,029	97,255
	2,650,693	**2,635,061**	**2,662,736**	**2,696,269**	**2,825,397**	**2,975,413**
Liabilities						
Due to other insurance companies	-	1	1	1	1	1
Accounts payable and accrued liabilites	34,157	38,153	39,902	41,684	43,505	45,402
Financing lease obligation	3,224	2,955	2,892	2,825	2,753	2,681
Unearned premiums and fees	426,137	463,923	487,979	513,223	539,518	567,071
Provision for employee current benefits	16,240	16,253	16,880	17,520	18,175	18,845
Provision for employee future benefits	286,581	289,816	303,510	318,434	334,015	350,309
Provision for unpaid claims	1,671,275	1,588,345	1,576,075	1,542,572	1,605,143	1,668,663
	2,437,614	**2,399,446**	**2,427,239**	**2,436,258**	**2,543,109**	**2,652,972**
Equity						
Retained earnings						
Basic Insurance Retained Earnings						
Rate Stabilization Reserve	165,600	179,200	188,000	197,200	206,800	216,800
Retained Earnings	12,217	15,817	1,125	11,829	15,128	35,063
	177,817	195,017	189,125	209,029	221,928	251,863
Accumulated Other Comprehensive Income	35,262	40,597	46,371	50,981	60,360	70,578
Total Equity	**213,079**	**235,614**	**235,497**	**260,010**	**282,288**	**322,441**
	2,650,693	2,635,061	2,662,736	2,696,269	2,825,397	2,975,413

Note: Rounding may affect totals

Manitoba Public Insurance
Multi-Year - Statement of Changes in Equity

2.95 % upgrade increase throughout the forecast period

(C$ 000s, except where noted)

	For the Years Ended February,					
	2015A	2016P	2017P	2018P	2019P	2020P
RATE STABILIZATION RESERVE (RSR)						
Basic Insurance Rate Stabilization Reserve						
Beginning Balance	99,877	165,600	179,200	188,000	197,200	206,800
Transfer from (to) Basic Retained Earnings	65,723	13,600	8,800	9,200	9,600	10,000
Ending Balance	**165,600**	**179,200**	**188,000**	**197,200**	**206,800**	**216,800**
Retained Earnings						
Beginning Balance	-	12,217	15,817	1,125	11,829	15,128
Net Income (Loss) from annual operations	2,440	17,200	(5,891)	19,904	12,899	29,935
Transfer from Non Basic Retained Earnings	75,500					
Retained Earnings Prior to Transfers	77,940	29,417	9,925	21,029	24,728	45,063
Transfer from (to) Rate Stabilization Reserve	(65,723)	(13,600)	(8,800)	(9,200)	(9,600)	(10,000)
Balance of Fund	**12,217**	**15,817**	**1,125**	**11,829**	**15,128**	**35,063**
Total Basic Retained Earnings	**$ 177,817**	**$ 195,017**	**$ 189,125**	**$ 209,029**	**$ 221,928**	**$ 251,863**
Total Accumulated Other Comprehensive Income	**$ 35,262**	**$ 40,597**	**$ 46,371**	**$ 50,981**	**$ 60,360**	**$ 70,578**
Total Equity	**$ 213,079**	**$ 235,614**	**$ 235,497**	**$ 260,010**	**$ 282,288**	**$ 322,441**

Minimum RSR based on PUB rules	82,900	89,700	94,200	98,900	103,700	108,700
Maximum RSR based on PUB rules	165,600	179,200	188,000	197,200	206,800	216,800
MPI Total Equity Target	213,000	213,000	213,000	213,000	213,000	213,000
MPI Max Target (MCT)	325,000	325,000	325,000	325,000	325,000	325,000

Note: Rounding may affect totals

Manitoba Public Insurance
Premiums Written and Earned

2.95 % upgrade increase throughout the forecast period

(C$ 000s, except where noted)

	2015A	2016P	2017P	2018P	2019P	2020P
BASIC						
Volume Change	1.82%	1.75%	1.75%	1.75%	1.75%	1.75%
Upgrading & Other Changes	2.72%	2.95%	2.95%	2.95%	2.95%	2.95%
Rate Change	0.90%	3.40%	0.00%	0.00%	0.00%	0.00%
Premiums Unearned during Year	46.30%	46.10%	46.10%	46.10%	46.10%	46.10%
Last Year Premiums Written	772,268	811,948	878,963	920,728	964,478	1,010,306
Volume Increase	14,055	14,209	15,382	16,113	16,878	17,680
Total Volume Written	786,323	826,157	894,345	936,841	981,356	1,027,987
Upgrading & Other Changes	21,388	24,372	26,383	27,637	28,950	30,326
Total With Upgrading	807,711	850,529	920,728	964,478	1,010,306	1,058,312
Impact of Rate Change (Excludes Volume Increases)	7,143	28,435	0	0	0	0
Adjustments	(2,906)	0	0	0	0	0
Total Premium Written Before Rebates	**811,948**	**878,963**	**920,728**	**964,478**	**1,010,306**	**1,058,312**
Fleet Rebates	(13,435)	(15,052)	(15,713)	(16,407)	(17,126)	(17,879)
Initiatives & Other Charges	(4,461)	(4,910)	(4,327)	(3,737)	(3,239)	(2,762)
Total Premiums Written	**794,052**	**859,002**	**900,688**	**944,334**	**989,941**	**1,037,671**
Reinsurance Ceded	(13,829)	(12,396)	(12,644)	(12,897)	(13,155)	(13,418)
Total Net Premiums Written	**780,223**	**846,606**	**888,044**	**931,437**	**976,786**	**1,024,254**
Beginning Unearned Premium Balance	348,398	367,665	396,000	415,217	435,338	456,363
Premiums Written	794,052	859,002	900,688	944,334	989,941	1,037,671
Unearned Premiums during Year	367,665	396,000	415,217	435,338	456,363	478,367
Premiums Earned	**774,785**	**830,667**	**881,471**	**924,213**	**968,916**	**1,015,668**
Reinsurance Ceded	(13,829)	(12,396)	(12,644)	(12,897)	(13,155)	(13,418)
Total Net Premiums Earned	**760,956**	**818,271**	**868,827**	**911,316**	**955,761**	**1,002,250**

Note: Rounding may affect totals

PUB (MPI) 1-14

Volume:	**I**	**Page No.:**	**OV.13, Page 35**
Topic:	**Transfer of Retained Earnings into Basic Rate Stabilization Reserve**		
Sub Topic:			
Issue:	**RSR Rebuilding Increases**		

Preamble: In Order 135/14, the Board recommended that in the absence of Board jurisdiction over non-Basic lines of business, the Corporation should develop a transparent strategy for the disposition of excess retained earnings in the Extension and SRE lines of business, to the benefit of Basic ratepayers. The Corporation has since transferred $75.5 million from non-Basic retained earnings to Basic retained earnings, to increase Basi's total equity position to $213.1 million, the minimum considered satisfactory by MPl's Chief Actuary as at February 28, 2015. MPI has advised the Board that unless it is notified otherwise, no transfers will be made to the Basic from Extension and SRE, though the Corporation agrees, when an RSR rebuilding increase is required, to make its intent known to the Board as to whether a transfer of excess retained earnings to the Basic RSR will be made.

Question:

Why does the Corporation refuse to develop a transparent strategy for the disposition of excess retained earnings in the Extension and SRE lines of business, to the benefit of Basic ratepayers, when an RSR rebuilding increase is requested?

Rationale for Question:

Within its Basic rate-setting mandate, the Board must determine the appropriate level of the Basic RSR, including whether ratepayers are required to pay an RSR rebuilding increase.

RESPONSE:

The Corporation acknowledges the Board's recommendation in Order 135/14. In the 2015 GRA in the CEO pre-filed testimony, the Corporation indicated:

> "Once the PUB and MPI have agreed on a satisfactory Basic RSR methodology and minimum target, MPI will be able to go forward and make other business decisions. As stated earlier in my testimony, Basic has sustained unprecedented (in recent decades) financial losses in the past two years. The Corporation, as it has done in the past when faced with significantly adverse financial results, is willing to rebuild the Basic RSR with a transfer of excess retained earnings from its competitive lines of business. The final amount to be transferred and the rate of transfer is yet to be determined, but will be based upon the methodology and minimum target in the Order forthcoming from this application."

In its Order 135/14, the Board stated:

> "For the purposes of this Order, and Fiscal 2015, the Board accepts the DCAT methodology, in principle but on a preliminary basis, for the purposes of establishing the RSR target range for Basic. For the time being and subject to further analysis, the Board accepts that a 1-in-40 year scenario probability level, as requested by MPI, is the appropriate threshold for the minimum RSR target for 2015/16. The Board also accepts that the minimum RSR target should be based on total equity, given the impact of unrealized equity investment gains within AOCI. **With respect to the specific dollar amounts that should form the minimum and maximum RSR/capital target range, the Board orders that further work be carried out.**" (emphasis added)

In its recent determination to transfer excess retained earnings from a competitive line to the Basic RSR, the Corporation endeavoured to be transparent to the Board, within its legislated framework. It is paramount for the Corporation to ensure that there be no deficiency in capital nor premiums in Basic. It is imperative for the Basic line of business to meet the fiduciary obligations held by the Board of Directors, officers, and senior management of the Corporation. At the 2015 GRA, the Corporation indicated the methodology and minimum target of the RSR must be determined for the transfer to the Basic RSR to occur. Furthermore, at that hearing, the CEO offered that the DCAT amount could actually be determined by the Board's actuarial advisor upon the condition that the Corporation's Chief Actuary and its external actuary could "sign-off" and provide opinions on the satisfactory financial condition of Basic.

In the unusual and extreme event of a future transfer of competitive line excess retained earnings the Board of Directors will consider the sequencing of events important to determine both the amount and timing of the transfer. In any given rating year there will be numerous different circumstances, projections, financial implications, and considerations, including the amount of the actuarially indicated rate increase/decrease. Any criteria would be specific to that rating year. The Board of Directors did approve a transfer from Non-Basic excess retained earnings to the Basic RSR because the specific circumstances warranted it. The same or different circumstances may in the future warrant transfers, depending upon funds being available, but the Board of Directors will assess that at that time.

Any amount to be transferred and when is wholly within the discretion of the Board of Directors of Manitoba Public Insurance. Should there be an unusual and extreme need in the future to consider a future transfer of excess retained earnings to the Basic RSR, then the Board will be advised based upon the circumstances at that time. In the meantime, Manitoba Public Insurance remains compliant to the legislation on this matter.

PUB (MPI) 1-15

Volume:	**I**	**Page No.:**	**CC.3, Page 9**
Topic:	**Value Equation**		
Sub Topic:			
Issue:	**New or enhanced Basic services**		

Preamble: The Corporation has stated that the reduction of corporate operating expenses will not be at the expense of delivering on the Corporation's Value Equation, which includes price, coverage, service and access.

Question:

a) Please advise of whether any new or enhanced Basic services are being developed or examined by MPI.

b) If so, please provide the nature of the service or enhancement, and the associated cost/benefit analysis.

Rationale for Question:

The Board must be provided with sufficient information relative to Basic services to enable the Board to consider necessity and prudency of the expenditure.

RESPONSE:

a) On June 30, 2015, Bill 17 received Royal Assent. Bill 17 enhances amounts payable under the Personal Injury Protection Plan (PIPP) by extending caregiver weekly indemnity (CGWI) to the surviving spouse or common-law partner of a deceased victim whose primary occupation at the time of the motor vehicle accident was caring for children under the age of 16 or infirm adult(s) without remuneration. This enhancement became effective retroactive to May 1, 2015.

On March 30, 2015, amending Regulation 41/2015 came into force amending Reimbursement for Expenses (Universal Bodily Injury Compensation) Regulation

40/94. Annual indexing of the following three previously un-indexed PIPP coverages became effective:

- Critical Care Attendance Allowance -- maximum reimbursement increased from $3,700 to $4,470
- Clothing Allowance -- maximum reimbursement increased from $900 to $1,038
- Claimant obtained medical reports in support of review and appeals – reimbursement for reports prepared by medical practitioners increased from $250 to $373

On May 11, 2015, amending Regulation 61/2015 came into force amending the Permanent Impairments (Universal Bodily Injury Compensation) Regulation 41/94. Technical changes to the medical terminology used in the permanent impairment schedule now better reflect current medical terminology used by practitioners and support consistent application of the permanent impairment indemnity calculation.

Moreover, the Corporation has also continued to work over the past year to enhance the services for some of its most vulnerable claimants in its catastrophic claimant population through the shared care residence in Brandon, described in detail in CAC (MPI) 1-17.

The PIPP Mediation program also continues to be supported by the Corporation as a way to improve the PIPP dispute resolution process for customers injured as a result of a motor vehicle accident. As at May 31, 2015, a total of 498 mediations had been concluded with a direct resolution rate of approximately 67%.

Services associated with the administration of the Basic plan, as well as the Personal Injury Protection Plan continue to be reviewed regularly.

In addition, the Corporation continues with initiatives to improve the delivery of existing services through the Physical Damage Re-engineering (PDR) project and the High School Driver Education Redevelopment project.

b) The estimated financial impact of the legislative change described in (a) for the enhanced caregivers weekly indemnity is $3.36 million annually.

The estimated annual cost impact for indexing critical care attendance allowance, clothing allowance and reimbursement of claimant obtained medical reports for in support of reviews and appeals was $28,000. In addition, reserves for claimants who are longer term or permanently injured and use the clothing allowance year over year, were increased one time by approximately $442,000.

No cost impact is associated with the permanent impairment schedule changes.

Costs and anticipated benefits related to the Brandon shared care residence are described in CAC (MPI) 1-17.

Total costs associated with the PIPP mediation project, including the pilot phase are $2,255,000. See Vol II Expenses EXP.5.2.

For additional information on the PDR initiative and the High School Driver Education Redevelopment project, refer to Vol III AI.10 and Vol I LP.4.1, page 18 respectively.

PUB (MPI) 1-16

Volume:	**I**	**Page No.:**	**PUB.11.4, Page 6**
Topic:	**Compliance with Board Order 135/14**		
Sub Topic:			
Issue:	**Physical Damage Re-Engineering Project Cost Containment Assessment**		

Preamble: In Board Order 135/14, MPI was ordered to file, at this year's GRA, baselines in terms of duration of repair shop contact with MPI and preliminary metrics by which to assess cost containment achievements of the PDR Project. In response to that directive, MPI has advised that cost containment models are in the process of being developed.

Question:

a) Please advise whether these cost containment models are expected to be completed and available to the Board within the context of this GRA.

b) If so, please advise when the models are expected to be filed with the Board.

c) If not, please advise why not.

Rationale for Question:

The Board must be provided with sufficient information relative to cost containment measures within Basic to enable the Board to consider necessity and prudency of Basic expenditures.

RESPONSE:

a) The cost containment models will not be available within the context of this GRA.

b) The cost containment models will not be available to the PUB until summer 2017, due to the on-going negotiations with the repair industry.

c) As referenced in Vol I PUB Order PUB.11.4 (a), the cost containment models that need to be completed are also associated with the distributed estimating pilot. The distributed estimating pilot has only just been launched and learnings from the pilot are essential to the cost containment model development and finalization.

PUB (MPI) 1-17

Volume:	**I**	**Page No.:**	**PUB.11.5, Page 7**
Topic:	**Compliance with Board Order 135/14**		
Sub Topic:			
Issue:	**BI^3**		

Preamble: In Board Order 135/14, MPI was ordered to file, *inter alia,* at this year's GRA, an update on the claim duration issue including whether pre-BI^3 benchmarks are being achieved. MPI has not responded to that aspect of the Board's directive.

Question:

Please advise whether any pre-BI^3 benchmarks are being achieved since the implementation of BI^3.

Rationale for Question:

The Board must be provided with sufficient information relative to benchmarking measures within Basic to enable the Board to consider necessity and prudency of Basic expenditures.

RESPONSE:

Manitoba Public Insurance (MPI) has developed two benchmarks related to claims duration. Actual post-BI^3 claims data is not fully developed. Pre-BI^3 claims data continues to develop (relapses, re-opened claims, etc.). Recent factors that impact the historical claims trends include:

- Enhanced customer service delivery model
- In excess of 30 coverage enhancements
- In excess of 15 significant policy changes to the benefit of the claimant
- Legal precedent decisions increasing scope of coverage (local and national)

Although the final impact of these factors has not fully developed, and therefore not completely known, they do not change the claims environment. We are actively monitoring this to see if any adjustments to the benchmarks may be required.

Irrespective of these factors, based on the claim retention table below, the Corporation is close to achieving pre- BI^3 historical trends.

<u>Claim Retention</u>

One of the key benchmarks MPI monitors is claims retention. An objective of MPI is to assist claimants with returning to their pre-accident status in a timely manner. The table below shows the number and percentage of income replacement claims where payments have been made during various stages of development (i.e. actual) relative to historical pre-BI^3 trends based on June 2015 data. The Corporation continues to work towards pre-BI^3 trends in recent loss years, while reviewing if changes will require a benchmark adjustment.

	Benchmark		Actual		Actual - Benchmark	
Date of Loss	**Active Claims**	**Percentage of Total**	**Active Claims**	**Percentage of Total**	**Active Claims**	**Percentage of Total**
2014/15	262	17.08%	293	19.13%	31	2.05%
2013/14	137	7.28%	162	8.59%	25	1.31%
2012/13	106	5.23%	135	6.66%	29	1.43%
2011/12	74	4.04%	107	5.84%	33	1.80%
2010/11	64	3.34%	104	5.40%	40	2.06%
2009/10	52	2.79%	83	4.42%	31	1.63%
2008/09	49	2.58%	84	4.46%	35	1.88%
2007/08			77	3.75%		
2006/07			93	4.43%		
2005/06			62	3.19%		
2004/05			52	2.55%		
2003/04			62	2.94%		
2002/03			57	2.60%		
2001/02			44	1.98%		
2000/01			46	1.97%		
2000 and Prior			281			

Claim Retention Reduced by Residual Capacity Determination or Canada Pension Plan Disability Benefits

As stated above, MPI strives to keep its claim retention as low as possible. The legislation provides the ability to reduce future claim exposure by performing a residual capacity determination after the second anniversary of the claim or applying for Canada Pension Plan (CPP) Disability Benefits. These reductions are not applied until rehabilitation efforts have been exhausted and it has been determined that the claimant will not return to their pre-accident employment due to the MVA related injuries. Only claimants with a previously sustained work history in Canada can apply for CPP benefits.

In the Corporation's experience, claims in excess of five years have a very low probability of returning to work. Based on historical data, MPI has established a benchmark of 58% of these claims having a reduction applied. Reductions impact claims incurred as soon as the reduction is confirmed (residual capacity determination decision letter issued or an approved CPP Disability Benefits application has been received). Claims payments are not impacted by residual capacity determinations until one year after the decision is rendered.

The table below shows the number of income replacement claims where payments have been made and percentage with reduced entitlement.

IRI Claims 2009/10 and Prior Open Status

		As at February 28, 2014		As of June 30,2015	
Department	**Benchmark**	**Active IRI Claims**	**Active Claims with Reduced Entitlement**	**Active IRI Claims**	**Active Claims with Reduced Entitlement**
Rehabilitation Management	58%	669	51%	607	49%
Serious and Long Term Care	43%	177	36%	168	36%

PUB (MPI) 1-18

Volume:	I	Page No.:	BMK, Page 35
Topic:	Benchmarking		
Sub Topic:			
Issue:	Changes in key trends		

Question:

a) Please explain the reasons for the variability in the operating expense ratio in 2014/15 and 2015/16.

b) Please explain the underlying reason for the change in the operating expense per policy ratio in 2014/15 and in 2015/16.

c) Please explain the underlying reasons for the claims expense per number of claims increasing by 6.54% in 2014/15 and falling by 1.69% in 20·16/17.

Rationale for Question:

To understand changes in trends that impact revenue requirement.

RESPONSE:

a) The operating expense ratio decreased from 2014/15 to 2015/16 because the operating expenses decreased, primarily related to decrease in amortization of deferred development costs (Vol II Appendix 2) and net premiums earned increased due to premium rate increase.

b) The operating expense per policy ratio decreased from 2014/15 to 2015/16 because the operating expenses decreased, primarily related to decrease in amortization of deferred development costs (Vol II Appendix 2) and number of policies increased.

c) The claims expense per number of claims increased in 2014/15 as the number of claims decreased while claims expenses remained comparable to 2013/14. The claims expense per number of claims decreased in 2016/17 as the number of claims increased while claims expenses decreased, compared to 2015/16.

PUB (MPI) 1-19

Volume:	**PUB/MPI I-63c 2015 GRA**	**Page No.:**	
Topic:	**Benchmarking**		
Sub Topic:			
Issue:	**Benchmarking Metrics**		

Preamble: Last year the Corporation indicated that it was still in the process of developing metrics to assess ongoing productivity in the areas of claims management, physical damage and the Contact Centre.

Question:
Please provide an update on the Contact Centre and physical damage metric development progress.

Rationale for Question:
To understand how MPI is managing costs.

RESPONSE:
Both the Contact Centre and Physical Damage have developed measures to assess ongoing productivity. These tools provide productivity information to management to monitor and administer service delivery in these business units.

PUB (MPI) 1-20

Volume:	III	Page No.:	AI, Page 12
Topic:	Benchmarking - Operational Efficiency		
Sub Topic:			
Issue:	Operational Efficiency		

Question:

Please provide a table indicating the Corporate performance measure from 2010/11 to 2014/15, actual and forecast, based on the current application for 2015/16 through 2017/18 and comment on the trend in each instance.

Rationale for Question:

To understand the trend from historical Corporate performance benchmarks and to assess the impact on revenue requirement.

RESPONSE:

The Ward's Group benchmarking process does not involve future forecasting of any metrics.

The table in Vol III AI.12 provides the corporate performance measures for 2010/11 to 2013/14. The corporate performance measures for 2014/15 will be provided in the 2017 General Rate Application.

PUB (MPI) 1-21

Volume:	**IT Benchmarking**	**Page No.:**	**PUB/MPI 1-79 Attachment (2015 GRA)**
Topic:	**IT Benchmarking**		
Sub Topic:			
Issue:	**IT Expenses**		

Preamble: At last year's GRA, MPI provided detail on the status of recommendations made by Gartner last year and in previous years. Many of the recommendations were under evaluation or in progress.

Question:

Please provide an update on the status of prior recommendations by filing an update to PUB/MPI 1-79 Attachment from last year's GRA

Rationale for Question:

To understand progress made over achievement of IT cost containment.

RESPONSE:

Please refer to the following pages.

		Status	Comments	Financial Impact
1. In order for MPI to better support running the business, MPI should consider:				
1.01	Begin a Telecom Expense Reduction Management program, beginning with regular audits to look for billing errors	Complete / Closed	Completed	This recommendation leads to process improvements that reduce MPI's exposure to potential future billing errors. To this point, cost savings have had no material impact on budgets.
1.02	Upgrade to a Voice Over IP Network to further optimize bandwidth utilization and lower costs	Complete / Operational	Completed	The implementation of this recommendation is complete. Financial benefits have been included in the 2016 GRA.
1.03	Invest in Help Desk resources and processes to improve First Call Resolution rates	Complete / Closed	Completed	The improved tools and processes implemented will improve internal IT service delivery and improve the capability to handle increasing call volumes without incremental FTEs. The value of the recommendation is in the improvements to customer service and not in cost savings.
1.04	Benchmark Applications Development and Support to identify additional optimization opportunities	In Progress	The optimization of application support (defect handling) is being reviewed. The optimization of application development is to be evaluated; no timeline has been set for this activity.	Analysis of application support (defect handling) optimization is anticipated to be complete in Q2, 2016-2017. Implementation of the findings will be scheduled based upon the outcome of the analysis. No timeline has been established at this time.

		Status	Comments	Financial Impact
1.05	Define and implement IT service management processes and tools (e.g., problem, change, and configuration management); Formalize a metrics-based IT operations process improvement program.	Complete / Closed	Completed	The improved tools and processes implemented will ensure IT completes priority work in an acceptable timeframe. Priority work includes proactive maintenance which contributes to system availability resulting in future cost avoidance (prevents key application downtime). The value of the recommendation is in the improvements to customer service and not in cost savings.
1.06	Begin to define positions and workgroups that are organized around cross-platform service processes (e.g., change management).	Complete / Closed	Completed	The improved tools and processes implemented will ensure IT completes priority work in an acceptable timeframe. Priority work includes proactive maintenance which contributes to system availability resulting in future cost avoidance (prevents key application downtime). The value of the recommendation is in the improvements to customer service and not in cost savings.
1.07	Develop staff performance and productivity metrics that are regularly reported and tracked.	Complete / Closed	Completed	IT is following the corporate initiative of performance management. No specific financial impact has been defined at this time.

		Status	Comments	Financial Impact
1.08	Establish operating level agreements (OLAs) for all defined service processes and track performance over time	In Progress Target Timeframe February, 2016	MPI is currently tracking performance and evaluating appropriate OLAs. IBM service level monitoring is operational and regularly reviewed. OLA creation for IT personal computing services are in progress.	The improved tools and processes implemented will ensure IT completes priority work in an acceptable timeframe. Priority work includes support of other divisions in their execution of operational priorities and their direct interaction with customers and partners. The value of the recommendation is in the improvements to customer service and not in cost savings.
1.09	More actively enforce existing standards and put change management controls in place.	Complete / Closed	Completed	The improved tools and processes implemented will ensure IT effectively controls system changes. Better controls avoid conflict between work packages and avoids unplanned system impacts; both of these contribute to system availability which is core to operational efficiency. The value of the recommendation is in the improvements to customer service and not in cost savings.
1.10	Implement automated failover triggers and processes for most critical systems.	Project in Progress Target Timeframe for Critical Systems by February, 2016	Work is currently being done under the High Availability project as part of the IT Optimization program.	Please see the information previously provided for the IT Optimization project.

		Status	Comments	Financial Impact
1.11	Increase usage of tools to automate and support operational and service management processes.	Complete / Closed	Completed	The improved tools and processes implemented improve internal IT service delivery and improve the capability to handle increasing work volumes without incremental FTEs. The value of this recommendation is in increased customer service and has no specific cost savings.
1.12	Develop an IT business and operating model that is similar to that of an internal service provider using service unit costing.	Not Accepted / Closed		MPI does not foresee any cost savings by pursuing this recommendation.
1.13	Continue to invest in the further integration of asset/license management with other IT service management disciplines.	Complete / Closed	This recommendation has been restated by Gartner as recommendation 1.23.	This recommendation leads to process improvements that reduce MPI's exposure to risk of non-compliance with software licensing.
1.14	Formalize a set of basic contract renegotiation processes.	Not Accepted / Closed	Gartner is no longer including this recommendation. Was previously rejected by MPI due to the already stringent contract processes in place at MPI.	MPI previously rejected this recommendation because of the stringent procurement processes already in place.
1.15	Use competitive bidding practices (e.g. RFI, RFP) to strive for best price-to-performance ratios	Not Accepted / Closed		MPI is not accepting this recommendation because of the stringent procurement processes already in place.

		Status	Comments	Financial Impact
1.16	Develop a Vendor Scorecard for key vendors that measures the "health" of the relationship as well as ongoing price-to-performance	Complete / Closed	Completed	The processes that are in place for vendor management ensures that MPI is getting the full value from its contracts and therefore the value from this recommendation is in the form of improved vendor performance and not in specific cost savings.
1.17	Develop a standard operating environment for all IT services.	In Progress	MPI continues to progress on standardization.	Please see the information previously provided for the IT Optimization project and the High Availability project.
1.18	Initiate a project to rationalize MPIs printer fleet across the enterprise.	In Progress Target Timeframe November, 2015	MPI is currently optimizing its printer fleet across the enterprise.	MPI expects to realize $25,000 in operational cost savings from this initiative plus more savings in future cost avoidance. The costs for the initiative are part of the ongoing maintenance.
1.19	Proactively pilot new infrastructure technologies with the business (e.g. Unified Communications, BYOD)	Complete / Closed	Completed	The financial impacts of piloting new technologies are assessed on a case by case basis and viable solutions are brought forward in the form of business cases.
1.2	Explore use of public/hybrid Cloud for back-up.	Under Evaluation	MPI, via technology partners, continues to review the value of cloud technologies and the applicability of cloud to MPI's operating environment.	MPI has not evaluated this recommendation in terms of cost and therefore does not have information regarding the financial impact of implementing this recommendation.

		Status	Comments	Financial Impact
1.21	Formalize process improvement programs.	In Progress	MPI is currently implementing continuous improvement on processes implemented by the IT Optimization program. Further formalization of process improvement programs is under consideration, but no timeline for implementation has been established.	This is a process improvement that is tied to higher IT maturity and not tied to cost savings.
1.22	Create specific guidelines and qualifications for employees to telework.	To Be Evaluated	Changes of this nature involve modifications to the Collective Agreement and therefore must be addressed through the collective bargaining process.	MPI has not evaluated this recommendation yet and therefore does not have information regarding the financial impact of implementing this requirement.
1.23	Integrate asset/license management with other IT disciplines.	Complete / Closed	Completed	This recommendation leads to process improvements that reduce MPI's exposure to risk of non-compliance with software licensing.

		Status	Comments	Financial Impact
2. In order for MPI to better support growing the business, MPI should consider:				
2.01	Begin to gather data on budgets and spending patterns by application. This requires that time reporting be granular enough to identify projects as well as support by application. Concentrate on the links between business processes and the software that supports it.	To Be Evaluated	This is a significant undertaking and no timeline has been established for further review.	MPI has not evaluated this recommendation yet and therefore does not have information regarding the financial impact of implementing this requirement.
2.02	Invest in process discovery technologies, such as business process analysis, and start building a business process framework and architecture. Bring together the various applications managers to share best practices and identify areas where the most mutual value could be derived from shared processes and programs.	Cancelled / Closed	This is no longer included in Gartner's list of recommendations.	MPI did not evaluate the cost impact of this recommendation.
2.03	Begin to evaluate tools to monitor application performance and to automate and control key processes, such as change and release management.	Operational	Technologies are in place to monitor infrastructure and applications . Continuous improvement to automate and control change and release management continues.	Please see the information previously provided for the IT Optimization program.
2.04	Add a new dimension of “process” as an organizing construct to complement functional, product and geographical orientation (e.g. end-to-end Incident Management).	On hold	Deemed lower priority relative to other IT risks the Corporation is presently addressing.	MPI has not evaluated this recommendation yet and therefore does not have information regarding the financial impact of implementing this recommendation.

		Status	Comments	Financial Impact
2.05	Review information needs in the context of regulatory and compliance requirements to ensure data is available to support new projects.	Complete / Closed	Completed	This recommendation deals with the understanding regulatory requirements and ensuring that the information to meet those requirements is available. There is no specific financial impact.
2.06	Explore use of dependency mapping tools that align applications and infrastructure resources to business processes. These can ensure that IT has the right resources in place to support growth.	To Be Evaluated	Deemed lower priority relative to other IT risks the Corporation is presently addressing.	MPI has not evaluated this recommendation yet and therefore does not have information regarding the financial impact of implementing this recommendation.

		Status	Comments	Financial Impact
3. In order for MPI to better support transforming the business, MPI should consider:				
3.01	Establish a target Transformation budget for IT investments such as mobile, social media that can change the dynamic as to how MPI empowers and interacts with Manitobans.	Not Accepted / Closed	The funding process for these types of initiatives would be consistent with our current budgeting / planning process.	MPI does not foresee any cost savings by pursuing this recommendation.
3.02	Increase the span of EA's influence throughout business areas by ensuring that governance processes exist and their importance is clearly communicated such that they are not circumvented. Often this involves building up stakeholder support.	Under Evaluation	Deemed lower priority relative to other IT risks the Corporation is presently addressing.	MPI has not evaluated this recommendation yet and therefore does not have information regarding the financial impact of implementing this recommendation.
3.03	Clearly communicate the value of enterprise architecture, or its content, to the key stakeholders in terms that relate to their issues and proactively address their opportunities. This includes business management, key business stakeholders, key IT stakeholders and the overall enterprise architecture community. Look to build business outcome oriented deliverables and communicate success to drive ongoing support for EA.	Under Evaluation	Deemed lower priority relative to other IT risks the Corporation is presently addressing.	MPI has not evaluated this recommendation yet and therefore does not have information regarding the financial impact of implementing this recommendation.

		Status	Comments	Financial Impact
3.04	Ensure that a culturally appropriate future state architecture exists, that a baseline of your current state exists, and a gap analysis is performed.	Under Evaluation	Deemed lower priority relative to other IT risks the Corporation is presently addressing.	MPI has not evaluated this recommendation yet and therefore does not have information regarding the financial impact of implementing this recommendation.

		Status	Comments	Financial Impact
4. In order for MPI to be more effective and innovative, MPI should consider:				
4.01	IT needs to better partner with the business to better leverage technology to differentiate performance.	Cancelled / Closed	Completed	This is a process improvement that is tied to higher IT maturity and not tied to cost savings.
4.02	Develop and improve processes that address IT's responsiveness to changing business priorities such as EA, BPM, and IT governance.	Operational	MPI leverages Gartner recommendations and oversight to ensure delivery capabilities remain comparable to relevant peer groups.	These are recommendations to improve operational efficiency and are not anticipated to provide cost savings.
4.03	Develop, document and implement an information strategy (2014 - This may or may not include hiring of a Chief Data Officer)	On hold	Strategy development deferred due to other key priorities. Not available at this time.	MPI has not evaluated this recommendation yet and therefore does not have information regarding the financial impact of implementing this requirement.
4.04	Promote how IT is responsive to changing priorities by communicating success stories	Complete / Closed	Completed	This recommendation is tied to higher IT Maturity and improving IT culture. It is not linked to increasing or decreasing of costs.
4.05	Work with business partners to pilot new infrastructure technologies such as Unified Communications, Voice over IP, Bring Your Own Device, Cloud, etc. Explain the potential benefits (e.g. mobility, lower costs) and risks (e.g. Security) of each solution.	Cancelled / Closed	This recommendation has been restated as recommendation 1.19.	See recommendation 1.19

		Status	Comments	Financial Impact
4.06	Hold "learning lunches" for company employees or use video demonstrations via company intranet as part of broader communications plan	Complete / Closed	Completed	The cost associated with new mediums (video / intranet) is handled within existing operational infrastructure. It is expected to increase effectiveness in the communication of key messages without incremental operational investment.
4.07	Begin identifying duplicative functionality in the Applications Portfolio and streamlining the portfolio to avoid duplication of functionality.	Operational	MPI reviews its application portfolio before introducing any new technologies to ensure that there is no duplication of technology.	The process of identifying and eliminating duplicative functionality is built into MPI's IT procurement processes. Cost savings are in the form of maximized operational support costs.
4.08	Assess the impact of deferred application maintenance and/or retirement of application on the portfolio in terms of cost of additional non-value added activities; increased time-to-market for IT dependent product enhancements or customer service improvements; additional time to test changes to functionality; etc. – collectively these items are known as "technical debt"	To Be Evaluated		MPI has not evaluated this recommendation yet and therefore does not have information regarding the financial impact of implementing this requirement.
4.09	Communicate technical debt to IT and business leadership and develop a long-term program to remove it from the MPI environment (e.g. through increased adherence to technology standards and application re-use) and track the success of those efforts	To Be Evaluated		MPI has not evaluated this recommendation yet and therefore does not have information regarding the financial impact of implementing this requirement.

		Status	Comments	Financial Impact
4.10	Develop 3 year staffing model to ensure key skills are available in-house to reduce reliance on contractors and consultants	To be evaluated		MPI has not evaluated this recommendation yet and therefore does not have information regarding the financial impact of implementing this requirement.
4.11	Consider conducting an IT Customer Satisfaction benchmark to assess business unit satisfaction with IT and uncover suggestions from internal customers/end users for value added improvements.	In Progress Target Timeframe August, 2015	MPI has implemented internal customer satisfaction measurements for some areas of IT and is currently evaluating extending to other areas of IT.	The value of this recommendation is in improved customer service and not in cost savings.
4.12	Review compensation strategies to ensure that MPI is competitive with market rates and can attract the talent it needs to deliver on its mission.	In progress	This has been completed for select technical positions.	The reviews were conducted on a case by case basis and did not result in material changes to operational expenses (compensation)

PUB (MPI) 1-22

Volume:	IT Benchmarking	Page No.:	PUB/MPI 1-81 (2015 GRA)
Topic:	Expenses		
Sub Topic:			
Issue:	IT Expenses		

Preamble: At last year's GRA, MPI indicated that it had 332 FTEs (Corporate and contractor) working on IT.

Question:

Please provide an update indicating the number of Corporate and contractor staff working on IT, and compare with that which was provided at last year's GRA.

Rationale for Question:

To understand whether cost containment efforts extend to the delivery of IT infrastructure, a major area of costs incurred by the Corporation.

RESPONSE:

There are 329 Corporate and contractor staff working on IT.

PUB (MPI) 1-23

Volume:	I and II	Page No.:	OV.7, Page 19 EXP, Appendix 6
Topic:	Cost Containment		
Sub Topic:			
Issue:	Staffing Levels		

Preamble: Manitoba Hydro provided a strategy to contain costs through attrition, including from retirements. MPI has indicated that it would realize a $2.4 million reduction in compensation for 2015/16 from that forecast at the last GRA, due to an analysis of expected staff turnover.

Question:

a) Please explain why the hiring freeze was lifted.

b) Please file a copy of the staff turnover analysis for 2015/16.

c) Please indicate how many positions became vacant in that last three years, and the postings for job positions made and filled externally.

d) Please file a copy of the statistics with respect to retirement over the previous five years, and forecast the level of attrition related to retirements through the outlook period.

e) Please indicate the current number of staff eligible for retirement and the assumption around retirement take-up for the next five years.

Rationale for Question:

To understand the forecast of staffing levels through the test years and outlook.

RESPONSE:

a) The hiring freeze has been lifted as the Corporation has decided to manage the number of FTEs and the associated costs through a commitment to reduce the FTE count by 30 in 2015/16. The CEO continues to approve all management hires.

b) Period of February 27, 2015 – July 2, 2015

Voluntary Turnover	Involuntary Turnover	Retirements	Total	
23	8	26	57	
1.2%	0.4%	1.3%	2.9%	Percentage of overall permanent employee headcount (including active and leave employees); used previous 12 month rolling average to determine percentage

The total overall turnover (%) is consistent with turnover experienced in the previous three years.

c)

	2013/14	2014/15	2015/16 (as of July 2, 2015)
Total number of separations resulting in position vacancies	136	129	57

The above chart outlines the number of permanent position vacancies (excludes term positions).

External Posting Information (Approximate Numbers)

	2013	2014	2015 (to date)
Number of external postings	57	56	27
Number of positions covered through the above postings	83	102	44
Number of positions filled through the external postings	57	83	13

Many of the postings for 2015 remain in progress.

d) Retirements over the past five fiscal years:

- 2010/11: 71
- 2011/12: 58
- 2012/13: 63
- 2013/14: 60
- 2014/15: 58

The level of attrition related to retirements throughout the outlook period is not forecasted.

e) There are presently 122 employees (including active and inactive employees) who are eligible to retire.

PUB (MPI) 1-24

Volume:	I and II	Page No.:	CC, Attachment A and B EXP.3.2.4, Page 25
Topic:	Operating Expense		
Sub Topic:			
Issue:	Cost Containment - Staffing Levels		

Preamble: MPI states that the vacancy allowance has resulted in savings of $7.5 million, representing 100 FTEs. This equates to about $75,000 per FTE. MPI has also indicated that it has achieved a staffing reduction of 30 FTEs at a saving of $1.5 million, or $50,000 per FTE.

Question:

a) Please confirm that a full time position is the same as a Full Time Equivalent (FTE). If not, please reconcile.

b) Please provide the supporting calculations around the 2015/16 savings related to the 30 FTE reduction, including the number of positions by classification, the average salary including benefits by department, and the projected savings on this basis.

c) Please provide a continuity schedule of staffing level for total corporate operations by department for 2013/14 and the changes in staffing levels in 2014/15 , 2015/16 and 2016/17

d) Please provide the annualized impact of the 30 FTE savings on 2016/17.

e) Please indicate what average salary and benefits per FTE is used within the Corporation for head count analysis.

f) Please elaborate on what other cost savings measures are being considered by the Corporation.

Rationale for Question:

To test the reasonableness of cost containment savings related to staff reductions.

RESPONSE:

a) Confirmed.

b) The Corporation identified 30 positions that would comprise the reduction during the 2015/16 fiscal year. The specific position classifications, along with the associated Division subject to the FTE reduction has been provided below:

Position Type	General Counsel	Bus Dev Comm	Finance	Cust Serv	IT/Bus Trans.	* Avg Salary	Approx Savings
Clerical	(2.0)	(2.0)		(12.0)		45.4	726.4
Tech/Prof		(2.0)	(2.0)		(6.0)	66.2	662.0
Mgmnt		(1.0)	(2.0)		(1.0)	109.0	436.0
Corp. Total	**(2.0)**	**(5.0)**	**(4.0)**	**(12.0)**	**(7.0)**		**1824.4**

*Average salary per Vol II Expenses Appendix 7

As can been seen from the above chart, the estimated full year savings for salaries on the 30 FTE is approximately $1.8 million. Due to the uncertainty as to when these positions would be removed (beginning, middle, or end of year), the Corporation budgeted for an approximated savings of $1.5 million.

c) Please refer to PUB (MPI) 1-30 for staffing levels by division for 2013/14 and 2014/15. Staffing levels for 2015/16 and 2016/17 can be found in Vol II Expenses Table 3.1.1.2, page 17.

d) The projected annualized impact of the 30 FTE savings on 2016/17 is approximately $1.8 million.

e) Average salary typically used for headcount analysis is $75,000.

f) Please refer to Vol I Cost Containment page 6 and 7 which identify other areas the Corporation is seeking to control and reduce costs.

PUB (MPI) 1-25

Volume:	**II**	**Page No.:**	**EXP, Appendix 13, Page 36**
Topic:	**Expenses**		
Sub Topic:			
Issue:	**Amortization Expense**		

Preamble: In its annual report, MPI has indicated deferred development costs of $29.1 million have not yet been put into use and are currently not being amortized.

Question:

a) Please explain the accounting policy followed for the amortization of deferred development costs.

b) Please provide a breakdown of the deferred development costs by project that is currently not in-service for 2014/15, 2015/16 and 2016/17

c) Please indicate what aspect of the physical damage re-engineering project detailed on Page 4 of the project charter is operational and is use in 2016/17.

d) Please explain the negative $4,111 expenditure for Physical Damage Re-Engineering in 2014/15.

Rationale for Question:

To assess the reasonableness of revenue requirement related to amortization of deferred development costs.

RESPONSE:

a) The policy is that deferred development costs will start to be amortized in the year following completion of the project. All projects are amortized using straight line over five years, except BI^3 is amortized over three years because its product cycle is only three years.

b) Please refer to Vol II Expenses Appendix 13. For 2014/15 through 2016/17, there are only two current in-service projects which are HR Management System Phase 1 and 2 and Physical Damage Re-Engineering Phase 1 and 2. Therefore, the remaining projects represent the ones currently not in-service

c) Phases 1 and 2 of the Physical Damage Re-Engineering project have been completed. The only aspect detailed on Page 4 of the project charter included in these phases is Phase 1 of Website Redesign and Portal Consolidation.

Also included are the following:

- PD Industry Study
- PDR Phase 1
- Contact Centre Unified Communication
- Estimatics Risk Assessment

While Collaborative Estimating is not operational at this time, it is projected to be completed by end of 2015/16.

d) During the 2014/15 fiscal year, a request to track the Optimized Repair phases of PDR was received. The adjustment was made retroactively resulting in negative deferred development balance for the main phase of PDR for the current year.

PUB (MPI) 1-26

Volume:	**II**	**Page No.:**	**EXP, Appendix 3, 4 and 11, Pages 10, 11 and 33**
Topic:	**Capital Expenditures**		
Sub Topic:			
Issue:	**Other / Provision**		

Preamble: MPl's forecast of other/provision for deferred capital projects for 2014/15, 2015/16 and 2016/17 is lower by $13 million over what was incurred and forecast to be incurred at this GRA.

Question:

Please provide details of the other/provision deferred projects that were contemplated at the last GRA and explain the major reductions in 2014/15, and now forecast for 2015/16 and 2016/17 reflected in this year's application.

Rationale for Question:

To understand the reasonableness of forecast capital spending.

RESPONSE:

Please refer to PUB (MPI) 1-74 (b) 2015 GRA as it relates to details for the provision and why the Corporation includes it in their annual forecasts.

> **PER: 2015 GRA, PUB (MPI) 1-74 (b) in 2015 GRA**
>
> *The provision for future project expenses is a management forecast of project expenses that have yet to be formalized. The Corporation is committed to continual improvements in service and efficiency through the application of technology. As such, it is to be expected that projects will be undertaken in the future and adequate provision for these projects should be included in the forecast.*

During last year's rate application some projects were not formalized at the time the application was submitted.

As illustrated in Vol II Expenses Appendix 12 these projects are now known and have been confirmed. In 2014/15 the reductions this year compared to last year are primarily attributed to the timing of the PDR project. In 2015/16 last year's provision of $4.8 million was required to account for projects such as High School Driver Education Phase 2, Predictive Analytics, Legal Management, PD-Centre of Excellence, BI[3] Upgrade, Enterprise Data Masking and the Lawson Upgrade. For 2016/17 the large provision forecast in last year's GRA was required to account for the Technology Modernization initiative.

PUB (MPI) 1-27

Volume:	**II**	**Page No.:**	**EXP, Appendix 13, Page 36**
Topic:	**Expenses**		
Sub Topic:			
Issue:	**Deferred Development Costs**		

Preamble: In its annual report MPI has indicated Deferred development costs of $29.1 million have not yet been put into use and are currently not being amortized.

Question:

Please explain the negative $4,111 expenditure for Physical Damage Re-Engineering in 2014/15

Rationale for Question:

To assess the reasonableness of revenue requirement related deferred development costs.

RESPONSE:

Please refer to PUB (MPI) 1-25 (d).

PUB (MPI) 1-28

Volume:	**I and II**	**Page No.:**	**ITS, Page 22 EXP, Appendix 12, Page 35**
Topic:	**Physical Damage Re-engineering**		
Sub Topic:			
Issue:	**Capital Expenses**		

Preamble: The current overall cost savings estimate has not changed from the project charter presented at the last GRA. The date of the savings now appears to be in 2021/22.

The cost estimate provided last year was $65.5 million and the project was forecast to be completed 2018/19 with major forecast capital spending completed by 2017/18. MPI capital spending forecast now indicates that PDR project spending extends to 2020.

Question:

a) Please explain why the project has been delayed to full implementation beyond 2020.

b) Please reconcile the detail of savings presented this year with the estimated savings presented in the project charter at the last GRA, and compare when savings were to be realized at the last GRA with the current projection.

c) Please provide a separate schedule detailing all of the capital and implementation costs projected to be incurred related to the Physical Damage Re-engineering project and compare with the estimate provided in the project charter and detail provided in PUB/MPI 1-75 (2015 GRA).

d) Please indicate whether there has been any change in the scope of the project; if so, please explain and indicate what if any changes there are to the costs of the project.

e) Please file any update to the project charter.

Rationale for Question:

Capital costs of projects impact MPI operations and revenue requirement.

RESPONSE:

a) The automobile manufacturing industry is experiencing significant and accelerating changes in the design and building of increasingly complex vehicle through the use of new construction processes and materials. This is resulting in corresponding pervasive changes to the automobile repair industry. The Corporation has also concluded that learnings from the collaborative estimating roll-out were essential to finalize the future end state. In light of this, the Corporation has slowed the rate of change to consider these changes and to factor them into the final design of the program as well as re-baselining the future project spend rate and delivery timeframes.

b) Comparison of savings presentations from both the 2015 and 2016 submissions is provided in the table below along with the key reasons for any adjustment.

	2015 Submission Section: PDR Charter		2016 Submission Section: IT Strategy		Difference	Comments
	Operating Expenses	Claims Incurred	Operating Expenses	Claims Incurred		
Process Improvement (Internal)	$3.5		$2.5		($1.0)	Reductions in Adjusting and Estimating operating expense savings
Total Loss Valuation with Salvage		$0.0		$1.0	$1.0	Adjusting process change affecting valuation (Claims Incurred)
Process Improvement (Shops)		$3.0		$3.0	$0.0	No Change
Loss of Use		$1.3		$3.0	$1.7	Increase due to revised strategy on LOU management
Parts Sourcing		$3.0		$2.8	($0.2)	Reduction after detailed analysis
Loss Prevention		$2.5		$1.0	($1.5)	Loss prevention due to Predictive Analytics is limited to 1.0 M Additional value aligns with Loss of Use (shown on that line).
	$3.5	**$9.8**	**$2.5**	**$10.8**		
Totals	**$13.3**		**$13.3**		**$0.0**	

in millions of dollars

The PDR project concludes by fiscal year 2019/20 when all elements have been implemented. While some savings are expected to be realized in earlier years, the full realization will occur by fiscal year 2021/22. The additional time after the project concludes is an allowance for customer take-up rates for use of the self service components and use of distributed estimating.

c) Please see attached.

d) There is no change in scope to the project at this time.

e) No updates to the project charter have been made.

PDR Program

In 000's

2015 GRA Corporate Total	Year 1 2011/12 A	Year 2 2012/13 A	Year 3 2013/14 A	Year 4 2014/15 P	Year 5 2015/16 P	Year 6 2016/17 P	Year 7 2017/18 P	Year 8 2018/19 P	Year 9 2019/20 P	Program Total
Deferred Development	-	3,679	11,350	17,650	14,481	5,521	5,603	-	-	58,284
Capital	-	-	-	233	243	59	15	-	-	550
Expense	1,386	109	481	987	1,667	2,022	-	-	-	6,652
Total	**$ 1,386**	**$ 3,788**	**$ 11,831**	**$ 18,870**	**$ 16,391**	**$ 7,602**	**$ 5,618**	**$ -**	**$ -**	**$ 65,486**

2016 GRA Corporate Total	Year 1 2011/12 A	Year 2 2012/13 A	Year 3 2013/14 A	Year 4 2014/15 A	Year 5 2015/16 P	Year 6 2016/17 P	Year 7 2017/18 P	Year 8 2018/19 P	Year 9 2019/20 P	Program Total
Deferred Development	-	3,679	11,350	8,144	9,856	6,629	5,411	6,596	6,271	57,936
Capital	-	-	-	-	219	36	11	-	-	266
Expense	1,386	109	481	407	1,925	2,365	275	-	-	6,948
Total	**$ 1,386**	**$ 3,788**	**$ 11,831**	**$ 8,551**	**$ 12,000**	**$ 9,030**	**$ 5,697**	**$ 6,596**	**$ 6,271**	**$ 65,150**

2016 GRA Difference	Year 1 2011/12	Year 2 2012/13	Year 3 2013/14	Year 4 2014/15	Year 5 2015/16	Year 6 2016/17	Year 7 2017/18	Year 8 2018/19	Year 9 2019/20	Program Total
Deferred Development	-	-	-	(9,506)	(4,625)	1,108	(192)	6,596	6,271	(348)
Capital	-	-	-	(233)	(24)	(23)	(4)	-	-	(284)
Expense	-	-	-	(580)	258	343	275	-	-	296
Total	**$ -**	**$ -**	**$ -**	**$ (10,319)**	**$ (4,391)**	**$ 1,428**	**$ 79**	**$ 6,596**	**$ 6,271**	**$ (336)**

PUB (MPI) 1-29

Volume:	II	Page No.:	EXP.3.2.11.1, Page 32
Topic:	ITO Main project		
Sub Topic:			
Issue:	Capital Expenses- ITO Project		

Preamble: At the 2015 GRA, MPI was forecasting to spend $3.1 million in 2014/15 and $1.2 million in 2015/16 on the IT optimization project. MPI indicated in response to PUB/MPI 2-26 last year that these increases were re-forecasted to be incurred in 2014/15 and 2015/16.

In this application, MPI reflects no spending on this project in 2014/15 and 2015/16 and has made the decision to commence the amortization of the project in 2014/15.

Question:

a) When was the ITO project completed?

b) Please explain why the full project spending forecast last year has changed in this year's application. Did the scope of the project change?

c) Why was the status of the project not known at last GRA?

RESPONSE:

a) The main part of the ITO project (excluding High Availability) was completed in 2013/14.

b) The overall scope of the project did not change, however, as the only work remaining in 2014/15 and onward related to the High Availability portion of the project, it was determined that the initial costs should be a separate asset and begin amortization in 2014/15.

c) Upon further review of the components of the overall ITO project, it was determined that the asset could be split into two projects with the main portion starting amortization in 2014/15 and the High Availability portion continuing to be capitalized in 2014/15 until completion.

PUB (MPI) 1-30

Volume:	Volume II 2015 GRA	Page No.:	EXP., Appendix 3 Table 3.1.1.2
Topic:	Expenses		
Sub Topic:			
Issue:	Staffing Levels		

Question:

Please provide the staffing continuity analysis for Basic operations in similar format to Appendix 3 from last year's GRA.

Rationale for Question:

To understand actual and forecast changes in staffing levels, to support assertion that 30 FTE savings have been realized.

RESPONSE:

The Corporation does not track FTE counts by line of business and therefore basic FTE counts are not available. Please see attachment for corporate staffing analysis.

NORMAL OPERATIONS STAFFING LEVELS

AVERAGE ACTUAL STAFF IN 2010/2011

CATEGORY	2010/11 Total Staff Actuals (FTE)						
	Service Operations	Strategy & Innovation	Claims Control & Safety Ops	Finance	Management Committee & Internal Audit	Community & Corporate Relations	**Total**
Management	35.9	35.4	26.0	11.6	10.0	20.0	138.8
Supervisory	68.9	20.9	22.6	-	-	5.7	118.1
Technical/Professional	275.6	306.3	169.6	45.2	9.9	103.3	909.9
Clerical	393.7	77.0	129.1	13.8	1.0	41.4	656.0
Total	**774.1**	**439.6**	**347.3**	**70.6**	**20.9**	**170.4**	**1,822.8**

STAFFING BUDGET IN 2010/2011

CATEGORY	2010/11 Total Budget (FTE)						
	Service Operations	Business Innovations & Insur. Ops.	Claims Ops & Service Delivery	Finance	Management Committee & Internal Audit	Community & Corporate Relations	**Total**
Management	36.0	37.0	28.0	13.0	11.0	21.0	146.0
Supervisory	68.0	34.0	20.0	-	-	2.0	124.0
Technical/Professional	277.7	320.6	173.4	48.0	9.0	92.4	921.1
Clerical	379.1	101.1	137.7	15.3	1.0	24.8	659.0
Total	**760.8**	**492.7**	**359.1**	**76.3**	**21.0**	**140.2**	**1,850.1**

COMPARISON ACTUAL VS. BUDGET 2010/2011

CATEGORY	2010/11 variance from budget to actuals (FTE)						
	Service Operations	Business Innovations & Insur. Ops.	Claims Ops & Service Delivery	Finance	Management Committee & Internal Audit	Community & Corporate Relations	**Total**
Management	(0.1)	(1.6)	(2.0)	(1.4)	(1.0)	(1.1)	(7.2)
Supervisory	0.9	(13.1)	2.6	-	-	3.7	(5.9)
Technical/Professional	(2.1)	(14.3)	(3.8)	(2.8)	0.9	10.9	(11.2)
Clerical	14.6	(24.1)	(8.6)	(1.5)	-	16.6	(3.0)
Total	**13.3**	**(53.1)**	**(11.8)**	**(5.7)**	**(0.1)**	**30.2**	**(27.3)**

Explanation of variance: Actual FTE counts were less than budget due to active Management of vacancies to control costs. Variances within divisions represent in year reorganization.

NORMAL OPERATIONS STAFFING LEVELS

AVERAGE ACTUAL STAFF IN 2011/2012

CATEGORY	2011/12 Total Staff Actuals (FTE)						
	Service Operations	Strategy & Innovation	Claims Control & Safety Ops	Finance	Management Committee & Internal Audit	Community & Corporate Relations	Total
Management	50.1	34.4	22.8	11.2	9.9	22.8	151.2
Supervisory	79.8	7.0	16.7	-	-	5.3	108.8
Technical/Professional	420.3	208.0	154.4	46.1	10.9	117.9	957.6
Clerical	463.0	25.2	100.4	14.8	1.0	40.9	645.3
Total	**1,013.2**	**274.6**	**294.3**	**72.1**	**21.8**	**186.9**	**1,862.9**

STAFFING BUDGET IN 2011/2012

CATEGORY	2011/12 Total Budget (FTE)						
	Service Operations	Strategy & Innovation	Claims Control & Safety Ops	Finance	Management Committee & Internal Audit	Community & Corporate Relations	Total
Management	50.0	42.0	25.0	13.0	10.0	24.0	164.0
Supervisory	97.0	8.0	17.0	-	-	6.0	128.0
Technical/Professional	390.7	245.3	167.1	48.0	9.0	114.8	974.9
Clerical	465.6	29.0	107.7	15.3	1.0	41.0	659.6
Total	**1,003.3**	**324.3**	**316.8**	**76.3**	**20.0**	**185.8**	**1,926.5**

COMPARISON ACTUAL VS. BUDGET 2011/2012

CATEGORY	2011/12 variance from budget to actuals (FTE)						
	Service Operations	Strategy & Innovation	Claims Control & Safety Ops	Finance	Management Committee & Internal Audit	Community & Corporate Relations	Total
Management	0.1	(7.6)	(2.2)	(1.8)	(0.1)	(1.2)	(12.8)
Supervisory	(17.2)	(1.0)	(0.3)	-	-	(0.7)	(19.2)
Technical/Professional	29.6	(37.3)	(12.7)	(1.9)	1.9	3.1	(17.3)
Clerical	(2.6)	(3.8)	(7.3)	(0.5)	-	(0.1)	(14.3)
Total	**9.9**	**(49.7)**	**(22.5)**	**(4.2)**	**1.8**	**1.1**	**(63.6)**

Explanation of variance: Actual FTE counts were less than budget due to active Management of vacancies to control costs. In addition, within the Strategy & Innovation division, activity that was budgeted to occur with internal staff was delayed and/or completed by the use of consultants.

NORMAL OPERATIONS STAFFING LEVELS

AVERAGE ACTUAL STAFF IN 2012/2013

CATEGORY	2012/13 Total Staff Actuals (FTE)						
	Service Operations	Strategy & Innovation	Claims Control & Safety Ops	Finance	Management Committee & Internal Audit	Community & Corporate Relations	Total
Management	52.4	37.0	12.0	12.9	9.3	29.5	153.1
Supervisory	81.6	7.8	7.2	1.0	-	10.2	107.8
Technical/Professional	457.2	226.7	79.2	62.8	11.7	158.7	996.3
Clerical	462.4	31.6	52.5	18.5	1.0	71.5	637.5
Total	**1,053.6**	**303.1**	**150.9**	**95.2**	**22.0**	**269.9**	**1,894.7**

STAFFING BUDGET IN 2012/2013

CATEGORY	2012/13 Total Budget (FTE)						
	Service Operations	Strategy & Innovation	Claims Control & Safety Ops	Finance	Management Committee & Internal Audit	Community & Corporate Relations	Total
Management	52.0	39.0	27.0	12.0	10.0	25.0	165.0
Supervisory	93.0	8.0	16.0	-	-	5.0	122.0
Technical/Professional	406.5	254.2	164.5	50.0	10.0	121.8	1,007.0
Clerical	457.8	25.3	103.3	15.3	1.0	40.0	642.7
Total	**1,009.3**	**326.5**	**310.8**	**77.3**	**21.0**	**191.8**	**1,936.7**

COMPARISON ACTUAL VS. BUDGET 2012/2013

CATEGORY	2012/13 variance from budget to actuals (FTE)						
	Service Operations	Strategy & Innovation	Claims Control & Safety Ops	Finance	Management Committee & Internal Audit	Public Affairs	Total
Management	0.4	(2.1)	(15.0)	0.9	(0.7)	4.5	(12.0)
Supervisory	(11.4)	(0.2)	(8.8)	1.0	-	5.2	(14.2)
Technical/Professional	50.7	(27.5)	(85.3)	12.8	1.7	36.9	(10.7)
Clerical	4.6	6.3	(50.8)	3.2	-	31.5	(5.2)
Total	**44.3**	**(23.4)**	**(159.9)**	**17.9**	**1.0**	**78.1**	**(42.0)**

Explanation of variance: Actual FTE counts were less than budget due to active management of vacancies to control costs. Variances within divisions represent in year reorganization. During 2012/13 the Claims Control and Safety Operations Division was dissolved and various departments moved to mainly Service Operations and Community and Corporate Relations.

NORMAL OPERATIONS STAFFING LEVELS

AVERAGE ACTUAL STAFF IN 2013/2014

CATEGORY	2013/14 Total Staff Actuals (FTE)						
	Service Operations	Strategy & Innovation	Claims Control & Safety Ops	Finance	Management Committee & Internal Audit	Community & Corporate Relations	Total
Management	58.5	36.3	-	16.1	8.1	36.6	155.6
Supervisory	108.0	6.0	-	1.0	-	12.0	127.0
Technical/Professional	481.9	241.0	-	82.2	12.1	181.5	998.7
Clerical	446.4	34.3	-	28.3	1.0	99.0	609.0
Total	**1,094.8**	**317.6**	**-**	**127.6**	**21.2**	**329.1**	**1,890.3**

STAFFING BUDGET IN 2013/2014

CATEGORY	2013/14 Total Budget (FTE)						
	Service Operations	Strategy & Innovation	Claims Control & Safety Ops	Finance	Management Committee & Internal Audit	Community & Corporate Relations	Total
Management	61.0	44.0	-	16.0	10.0	33.0	164.0
Supervisory	111.0	8.0	-	3.0	-	13.0	135.0
Technical/Professional	459.9	258.2	-	84.5	10.0	197.2	1,009.8
Clerical	466.6	29.3	-	26.3	1.0	102.7	625.9
Total	**1,098.5**	**339.5**	**-**	**129.8**	**21.0**	**345.9**	**1,934.7**

COMPARISON ACTUAL VS. BUDGET 2013/2014

CATEGORY	2013/14 variance from budget to actuals (FTE)						
	Service Operations	Strategy & Innovation	Claims Control & Safety Ops	Finance	Management Committee & Internal Audit	Public Affairs	Total
Management	(2.5)	(7.7)	-	0.1	(1.9)	3.6	(8.4)
Supervisory	(3.0)	(2.0)	-	(2.0)	-	(1.0)	(8.0)
Technical/Professional	22.0	(17.2)	-	(2.3)	2.1	(15.7)	(11.1)
Clerical	(20.2)	5.0	-	2.0	-	(3.7)	(16.9)
Total	**(3.7)**	**(21.9)**	**-**	**(2.2)**	**0.2**	**(16.8)**	**(44.4)**

Explanation of variance: Actual FTE counts were less than budget due to active management of vacancies to control costs and less use of internal staff.

NORMAL OPERATIONS STAFFING LEVELS

AVERAGE ACTUAL STAFF IN 2013/2014

CATEGORY	2014/15 Total Staff Actuals (FTE)							
	Customer Service	Business Development & Communications	Human Resources	Finance	Management, Internal Audit & Regulatory	General Counsel	IT & BT	**Total**
Management	61.9	29.7	6.1	23.7	13.4	2.0	27.2	164.0
Supervisory	125.9	6.7	-	1.0	-	1.0	5.6	140.2
Technical/Professional	505.2	126.0	33.6	92.7	9.5	19.2	203.0	989.2
Clerical	478.6	44.1	-	35.0	1.0	6.9	15.8	581.4
Total	**1,171.6**	**206.5**	**39.7**	**152.4**	**23.9**	**29.1**	**251.6**	**1,874.8**

STAFFING BUDGET IN 2014/2015

CATEGORY	2014/15 Total Budget (FTE)							
	Customer Service	Business Development & Communications	Human Resources	Finance	Management, Internal Audit & Regulatory	General Counsel	IT & BT	**Total**
Management	64.0	32.0	6.0	24.0	10.0	2.0	32.0	169.0
Supervisory	120.0	8.0	-	1.0	-	1.0	3.0	133.0
Technical/Professional	506.4	123.0	35.4	93.0	10.0	18.8	230.2	1,017.4
Clerical	498.0	49.6	3.0	37.8	1.0	6.0	13.5	609.3
Total	**1,188.4**	**212.6**	**44.4**	**155.8**	**21.0**	**27.8**	**278.7**	**1,928.7**

COMPARISON ACTUAL VS. BUDGET 2014/2015

CATEGORY	2014/15 variance from budget to actuals (FTE)							
	Customer Service	Business Development & Communications	Human Resources	Finance	Management, Internal Audit & Regulatory	General Counsel	IT & BT	**Total**
Management	(2.1)	(2.3)	0.1	(0.3)	3.4	-	(4.8)	(5.0)
Supervisory	5.9	(1.3)	-	-	-	-	2.6	7.2
Technical/Professional	(1.2)	3.0	(1.8)	(0.3)	(0.5)	0.4	(27.2)	(28.2)
Clerical	(19.4)	(5.5)	(3.0)	(2.8)	-	0.9	2.3	(27.9)
Total	**(16.8)**	**(6.1)**	**(4.7)**	**(3.4)**	**2.9**	**1.3**	**(27.1)**	**(53.9)**

Explanation of variance: Actual FTE counts were less than budget due to active management of vacancies to control costs.
*due to reorganization occurring in June /2104 average actual counts represent a 9 month average

PUB (MPI) 1-31

Volume:	**II**	**Page No.:**	**EXP.3.1.1, Page 17**
Topic:	**Expenses**		
Sub Topic:			
Issue:	**Vacancy Allowance**		

Preamble: MPI states that the vacancy allowance is 6%, representing $7.5 million in savings.

Table 3.1.1.3 Corporate Salaries analysis indicates 2016/17 gross salaries at $134.7 million and a vacancy allowance of $6.2 million or 4.6% of total gross salaries.

Question:

a) Please file the determination of the 6% vacancy allowance and demonstrate how the 6% vacancy allowance and $7.5 million savings is incorporated in the Corporate Salary Analysis.

b) Please indicate the actual vacancy percentage attained over the last ten years and the average of the last five and ten year periods, and compare with the targeted vacancy rate.

Rationale for Question:

To understand how the vacancy rate forecast and savings are incorporated in the application.

RESPONSE:

a) The determination of the 6% vacancy allowance is comprised of the 2015/16 budgeted vacancy allowance of $6 million plus the estimated savings related to the 30 FTE budget reduction in 2015/16 of $1.5 million. The result of this vacancy allowance and FTE reduction equals the $7.5 million in estimated savings. In table 3.1.1.3 the $1.5 million attributed to the FTE reductions are shown in Gross Salaries line and not in the vacancy allowance line.

b) As agreed in the Minimum filing requirements, analysis for expense items will be provided for the prior five years given that operations beyond that have less resemblance to current operations.

For the last five years, please refer to the following table:

Corporate Normal Operations – Actual Vacancy Allowance

2011A	2012A	2013A	2014A	2015A
3,365	4,919	4,652	4,851	6,222

5-Year Average (2011A to 2015A) = $4.802 million
Targeted Vacancy Rate for 2015/16 = $5.981 million

As can be seen in the above table, the actual vacancy allowance rate has continued to increase from 2012/13 through to the sharp rise occurring in 2014/15. This is due to the Corporation's commitment to cost containment and vacancy management. Due to the staff reductions budgeted in 2015/16, the Corporation expects the vacancy management allowance to stabilize.

PUB (MPI) 1-32

Volume:	**II**	**Page No.:**	**EXP.3.1.2, Page 18**
Topic:	**Expenses**		
Sub Topic:			
Issue:	**Salary Expense Analysis**		

Preamble: The salary analysis excludes full payroll costs incurred by MPI.

Question:

a) Please refile table 3.1.1.3 based on total compensation costs, including benefits.

b) Please refile table 3.1.2.1. analysis to include all payroll costs incurred, including benefits.

c) Please refile table 3.1.2.2 analysis to include all payroll costs incurred, including benefits.

d) Please file the results for (a), (b) and (c) based on all corporate operations, including implementation and implementation ongoing.

Rationale for Question:

To understand the changes in total compensation for the Corporation.

RESPONSE:

a) Please see table below. Total compensation includes all benefits and Health and Education Tax.

Corporate Compensation Analysis – Normal Operations

	2014/15	2015/16	Change	%	2016/17	Change	%	2017/18	Change	
Total Compensation	161,070	163,020	1,950		169,160	6,140		175,082	5,922	
Vacancy Allowance	(6,222)	(5,981)	241		(6,213)	(232)		(6,454)	(241)	
Total Net Compensation	**154,848**	**157,039**	**2,191**	1.41%	**162,947**	**5,908**	3.63%	**168,628**	**5,681**	3.37%
					COMPENSATION ANALYSIS					
Prior Year Balance			161,070			163,020			169,160	
FTE Changes			(1,533)							
Economic		1.15%	1,406		2.13%	2,655		1.75%	2,266	
Steps in scale		1.75%	2,147		1.75%	2,181		1.75%	2,266	
Other Salary Acct adj.			(880)			32			19	
Overtime			(286)			71			67	
Benefits			975			1,080			1,227	
H & E Tax			170			126			83	
Other / Rounding			(49)			(5)			(6)	
Total			**163,020**			**169,160**			**175,082**	

(C$000s, except where noted)

b) Please see table below. Total compensation includes all benefits and Health and Education Tax.

Corporate Compensation/Payroll Costs – Normal Operations

Year	Payroll Costs	Change from prior year	% Change	Average actual FTE	Average Comp per FTE ($)	% Change
2010/11	139,523	**8,149**	6.20%	1822.8	76.54	2.13%
2011/12	153,291	**13,768**	9.87%	1862.9	82.29	7.50%
2012/13	150,940	**(2,351)**	-1.53%	1894.7	79.66	-3.19%
2013/14	152,761	**1,821**	1.21%	1890.3	80.81	1.44%
2014/15	154,848	**2,087**	1.37%	1874.8	82.59	2.20%

(C$000s, except where noted)

c) Please see table below. Total compensation includes all benefits and Health and Education Tax.

Corporate Annual Compensation Changes – Normal Operations

Year	Chg. due to Econ. Incr.	Chg. due to Step in scale and other	Chg. due to Total salary rate change	Chg. due to FTE change	Chg. due to Over time	Chg. due to H&E Tax	Chg. due to Benefit	Total Comp. Inc / (Dec)	Chg Avg Actual (FTE)	Chg Avg Comp per FTE ($)
2010/11	2,956	(5,864)	(2,908)	3,997	906	67	**6,087**	**8,149**	69.9	1.60
2011/12	3,023	2,417	5,440	2,367	(178)	109	**6,030**	**13,768**	40.1	5.74
2012/13	1,594	1,087	2,681	1,914	(630)	64	**(6,380)**	**(2,351)**	31.8	(2.62)
2013/14	0	1,686	1,686	(268)	713	(23)	**(287)**	**1,821**	(4.4)	1.15
2014/15	1,327	2,478	3,805	(964)	(890)	101	**35**	**2,087**	(15.5)	1.78

(C$000s, except where noted)

A major contributing factor in the annual change in compensation was a result of service costs related to pension valuations in 2010/11, 2011/12 and 2012/13. As such, compensation analysis is best conducted when looking at salary fluctuations in isolation rather than the compensation category as a whole.

d) Please see tables from (a), (b) and (c) respectively, based on total compensation. Total compensation includes all benefits and Health and Education Tax.

The tables presented below represent annual compensation changes for Normal Operations and Improvement Initiative staff. Generally, the changes are consistent with the changes presented in (a), (b) and (c) with the exception of improvement initiative salary dollars and FTE counts.

Corporate Compensation Analysis – Corporate Total

	2014/15	2015/16	Change	%	2016/17	Change	%	2017/18	Change	
Total Compensation*	163,346	164,057	711		170,294	6,237		176,218	5,924	
Vacancy Allowance	(7,585)	(6,281)	1,304		(6,524)	(243)		(6,777)	(253)	
Total Net Compensation	**155,761**	**157,776**	**2,015**	1.29%	**163,770**	**5,994**	3.66%	**169,441**	**5,671**	3.35%
					COMPENSATION ANALYSIS					
Prior Year Balance			163,346			164,057			170,294	
FTE Changes			(1,533)							
Economic		1.15%	1,430		2.13%	2,537		1.75%	2,171	
Steps in scale		1.75%	2,184		1.75%	2,090		1.75%	2,171	
Other Salary Acct adj.			(881)			32			19	
Overtime			(432)			72			67	
Benefits			975			1,080			1,227	
H & E Tax			170			127			83	
Vacancy Allowance			(1,304)			243			253	
Other / Rounding			102			56			(67)	
Total			**164,057**			**170,294**			**176,218**	

(C$000s, except where noted)

In 2014/15, the vacancy allowance for Improvement Initiatives was $1.3 million, contributing to the variance over the budgeted year.

Corporate Compensation/Payroll Costs – Corporate Total

Year	Payroll Costs	Change from prior year	% Change	Average actual FTE	Average Comp per FTE ($)	% Change
2010/11	143,352	**10,202**	7.66%	1,871.4	76.60	12.00%
2011/12	155,061	**11,709**	8.17%	1,878.3	82.55	7.77%
2012/13	152,389	**(2,672)**	-1.72%	1,911.8	79.71	-3.45%
2013/14	153,741	**1,352**	0.89%	1,908.5	80.56	1.06%
2014/15	155,761	**2,020**	1.31%	1,886.6	82.56	2.49%

(C$000s, except where noted)

Corporate Annual Compensation Changes – Corporate Total

Year	Chg. due to Econ. Incr.	Chg. due to Step in scale and other	Chg. due to Total salary rate change	Chg. due to FTE change	Chg. due to Over time	Chg. due to H&E Tax	Chg. due to Benefit	Total Comp. Inc / (Dec)	Chg Avg Actual (FTE)	Chg Avg Comp per FTE ($)
2010/11	2,956	4,426	7,382	(4,240)	906	67	6,087	**10,202**	(75.4)	8.2
2011/12	3,052	2,290	5,342	406	(178)	109	6,030	**11,709**	6.9	6.0
2012/13	1,602	411	2,013	2,014	(504)	88	(6,283)	**(2,672)**	33.5	(2.8)
2013/14	-	1,265	1,265	(200)	719	(47)	(385)	**1,352**	(3.3)	0.8
2014/15	1,331	2,782	4,113	(1,353)	(876)	101	35	**2,020**	(21.9)	2.0

(C$000s, except where noted)

PUB (MPI) 1-33

Volume:	**PUB/MPI I-59(f) (2015 GRA)**	**Page No.:**	
Topic:	**Expenses**		
Sub Topic:			
Issue:	**Compound Annual Growth Analysis**		

Question:

a) Please file the compound annual growth for total Corporate expenses by category in a similar format to that provided in PUB/MPI I-59(f) (2015 GRA).

b) Please file a similar analysis to (a) for Basic expenses by Category.

Rationale for Question:

To provide a more relevant format of analysis for cross-examination purposes.

RESPONSE:

a) Please refer to Vol II, Expenses Appendix 4 and Table 3.2.12.2 for the 10-year summary of corporate normal operating expenses by category and compounded annual growth rates, respectively.

b) Please refer to Vol II, Expenses Appendix 2 and Appendix 3 for the 10-year summary of basic total expenses by category and compounded annual growth rates, respectively.

PUB (MPI) 1-34

Volume:	II	Page No.:	PF.1, PF.2, PF.3 Pages 3 - 5
Topic:	Alternate Rate Scenarios		
Sub Topic:			
Issue:	Financial Results		

Question:

a) Please provide a restated PF.1, PF.2 and PF.3, separating out amounts related to the premium deficiency reserves.

b) Using the presentation from a) above, please provide a restated PF.1, PF.2 and PF.3 with a 1.0% rate change in 2016/17.

c) Using the presentation from a) above, please provide a restated PF.1, PF.2 and PF.3 with a -1.0% rate change in 2016/17.

d) Please provide Pf.1, PF.2 and PF.3 indicating the rate increase required to approximately break even for 2016/17.

Rationale for Question:

To assess the adequacy of revenue requirements at alternate rate levels.

RESPONSE:

a) Refer to Vol II Claims Incurred CI.8.5. The financial forecasting model assumes no changes in Premium Deficiency reserves.

b) Please refer to attachment (b).

c) Please refer to attachment (c).

d) Please refer to attachment (d). It should be noted, for rate setting purposes, the Corporation looks at a break even rating target over two successive fiscal years due to staggered renewals. This question has been calculated by solely looking at a rate adjustment the 2016/17 fiscal year.

Manitoba Public Insurance
Multi-year - Statement of Operations

1.0 % rate increase in 2016/17

(C$ 000s, except where noted)	For the Years Ended February,					
	2015A	2016P	2017P	2018P	2019P	2020P
BASIC						
Motor Vehicles	794,052	854,303	902,526	945,226	988,715	1,034,641
Drivers	44,642	48,269	51,128	54,021	56,626	59,164
Reinsurance Ceded	(13,829)	(12,396)	(12,644)	(12,897)	(13,155)	(13,418)
Total Net Premiums Written	**824,865**	**890,176**	**941,010**	**986,350**	**1,032,186**	**1,080,387**
Net Premiums Earned						
Motor Vehicles	774,785	828,135	880,295	925,541	968,666	1,013,469
Drivers	42,926	46,782	49,704	52,580	55,329	57,900
Reinsurance Ceded	(13,829)	(12,396)	(12,644)	(12,897)	(13,155)	(13,418)
Total Net Premiums Earned	**803,883**	**862,520**	**917,356**	**965,225**	**1,010,840**	**1,057,951**
Service Fees & Other Revenues	19,475	20,922	22,350	24,106	26,023	28,187
Total Earned Revenues	**823,357**	**883,443**	**939,706**	**989,330**	**1,036,863**	**1,086,138**
Net Claims Incurred	745,837	588,900	677,135	691,514	823,463	862,064
Claims Expense	116,578	121,045	128,107	131,338	136,816	136,659
Road Safety/Loss Prevention	11,359	11,496	11,444	10,551	11,404	11,427
Total Claims Costs	**873,774**	**721,441**	**816,686**	**833,404**	**971,683**	**1,010,150**
Expenses						
Operating	74,283	71,401	74,643	77,218	80,043	80,552
Commissions	32,845	35,405	36,900	37,587	39,292	41,052
Premium Taxes	24,531	26,247	27,900	29,344	30,720	32,141
Regulatory/Appeal	3,935	3,154	3,210	3,273	3,338	3,404
Total Expenses	**135,595**	**136,208**	**142,653**	**147,422**	**153,392**	**157,149**
Underwriting Income (Loss)	**(186,011)**	**25,794**	**(19,633)**	**8,505**	**(88,212)**	**(81,161)**
Investment Income	188,451	(10,830)	12,606	12,632	100,803	108,931
Net Income (Loss) from Operations	**2,440**	**14,964**	**(7,028)**	**21,137**	**12,590**	**27,770**

Manitoba Public Insurance
Multi-year - Statement of Financial Position

1.0 % rate increase in 2016/17

(C$ 000s, except where noted)	*For the Years Ended February,*					
	2015A	**2016P**	**2017P**	**2018P**	**2019P**	**2020P**
BASIC						
Assets						
Cash and investments	1,593,442	1,556,669	1,548,651	1,551,670	1,633,569	1,724,123
Equity investments	598,842	614,624	627,653	638,609	670,364	705,335
Investment property	35,073	35,084	34,940	33,843	32,475	31,176
Due from other insurance companies	108	-	-	-	-	-
Accounts receivable	273,197	270,333	284,365	296,810	309,257	322,320
Prepaid expenses	-	291	291	291	291	291
Deferred policy acquisition costs	-	-	-	-	-	-
Reinsurers' share of unearned premiums	-	-	-	-	-	-
Reinsurers' share of unearned claims	2,565	-	-	-	-	-
Property and equipment	90,474	87,247	91,067	91,553	90,273	88,648
Deferred development costs	56,992	66,092	73,175	81,730	86,029	97,255
	2,650,693	**2,630,340**	**2,660,141**	**2,694,506**	**2,822,257**	**2,969,148**
Liabilities						
Due to other insurance companies	-	1	1	1	1	1
Accounts payable and accrued liabilites	34,157	37,993	39,965	41,714	43,463	45,299
Financing lease obligation	3,224	2,955	2,892	2,825	2,753	2,681
Unearned premiums and fees	426,137	461,757	488,826	513,634	538,952	565,674
Provision for employee current benefits	16,240	16,253	16,880	17,520	18,175	18,845
Provision for employee future benefits	286,581	289,816	303,510	318,434	334,015	350,309
Provision for unpaid claims	1,671,275	1,588,320	1,576,085	1,542,606	1,605,185	1,668,744
	2,437,614	**2,397,095**	**2,428,158**	**2,436,734**	**2,542,544**	**2,651,553**
Equity						
Retained earnings						
Basic Insurance Retained Earnings						
Rate Stabilization Reserve	165,600	178,300	185,753	197,500	206,700	216,300
Retained Earnings	12,217	14,481	-	9,390	12,780	30,950
	177,817	192,781	185,753	206,890	219,480	247,250
Accumulated Other Comprehensive Income	35,262	40,464	46,229	50,882	60,232	70,345
Total Equity	213,079	233,245	231,982	257,772	279,712	317,595
	2,650,693	**2,630,340**	**2,660,141**	**2,694,506**	**2,822,257**	**2,969,148**

Manitoba Public Insurance

Multi-Year - Statement of Changes in Equity

1.0 % rate increase in 2016/17

(C$ 000s, except where noted)	*For the Years Ended February,*					
	2015A	2016P	2017P	2018P	2019P	2020P
RATE STABILIZATION RESERVE (RSR)						
Basic Insurance Rate Stabilization Reserve						
Beginning Balance	99,877	165,600	178,300	185,753	197,500	206,700
Transfer from (to) Basic Retained Earnings	65,723	12,700	7,453	11,747	9,200	9,600
Ending Balance	**165,600**	**178,300**	**185,753**	**197,500**	**206,700**	**216,300**
Retained Earnings						
Beginning Balance	-	12,217	14,481	-	9,390	12,780
Net Income (Loss) from annual operations	2,440	14,964	(7,028)	21,137	12,590	27,770
Transfer from Non Basic Retained Earnings	75,500					
Retained Earnings Prior to Transfers	77,940	27,181	7,453	21,137	21,980	40,550
Transfer from (to) Rate Stabilization Reserve	(65,723)	(12,700)	(7,453)	(11,747)	(9,200)	(9,600)
Balance of Fund	**12,217**	**14,481**	**-**	**9,390**	**12,780**	**30,950**
Total Basic Retained Earnings	**$ 177,817**	**$ 192,781**	**$ 185,753**	**$ 206,890**	**$ 219,480**	**$ 247,250**
Total Accumlated Other Comprehensive Income	**35,262**	**40,464**	**46,229**	**50,882**	**60,232**	**70,345**
Total Equity	**$ 213,079**	**$ 233,245**	**$ 231,982**	**$ 257,772**	**$ 279,712**	**$ 317,595**

Minimum RSR based on PUB rules	82,900	89,300	94,400	99,000	103,600	108,500
Maximum RSR based on PUB rules	165,600	178,300	188,400	197,500	206,700	216,300
MPI Total Equity Target	213,000	213,000	213,000	213,000	213,000	213,000
MPI Max Target (MCT)	325,000	325,000	325,000	325,000	325,000	325,000

Note: Rounding may affect totals

Manitoba Public Insurance
Multi-year - Statement of Operations

-1.0 % rate change in 2016/17

(C$ 000s, except where noted)	For the Years Ended February,					
	2015A	**2016P**	**2017P**	**2018P**	**2019P**	**2020P**
BASIC						
Motor Vehicles	794,052	854,303	884,560	926,427	969,064	1,014,091
Drivers	44,642	48,269	51,128	54,021	56,626	59,164
Reinsurance Ceded	(13,829)	(12,396)	(12,644)	(12,897)	(13,155)	(13,418)
Total Net Premiums Written	**824,865**	**890,176**	**923,045**	**967,551**	**1,012,535**	**1,059,837**
Net Premiums Earned						
Motor Vehicles	774,785	828,135	870,612	907,126	949,408	993,334
Drivers	42,926	46,782	49,704	52,580	55,329	57,900
Reinsurance Ceded	(13,829)	(12,396)	(12,644)	(12,897)	(13,155)	(13,418)
Total Net Premiums Earned	**803,883**	**862,520**	**907,672**	**946,810**	**991,582**	**1,037,816**
Service Fees & Other Revenues	19,475	20,922	22,350	23,998	25,907	28,062
Total Earned Revenues	**823,357**	**883,443**	**930,022**	**970,808**	**1,017,489**	**1,065,877**
Net Claims Incurred	745,837	588,900	677,147	691,962	823,771	862,403
Claims Expense	116,578	121,045	128,107	131,338	136,817	136,660
Road Safety/Loss Prevention	11,359	11,496	11,444	10,551	11,404	11,427
Total Claims Costs	**873,774**	**721,441**	**816,699**	**833,851**	**971,992**	**1,010,490**
Expenses						
Operating	74,283	71,401	74,643	77,218	80,043	80,552
Commissions	32,845	35,405	36,648	36,994	38,671	40,403
Premium Taxes	24,531	26,247	27,609	28,791	30,142	31,537
Regulatory/Appeal	3,935	3,154	3,210	3,273	3,338	3,404
Total Expenses	**135,595**	**136,208**	**142,110**	**146,276**	**152,194**	**155,896**
Underwriting Income (Loss)	**(186,011)**	**25,795**	**(28,787)**	**(9,319)**	**(106,696)**	**(100,508)**
Investment Income	188,451	(10,830)	13,013	13,341	100,063	107,279
Net Income (Loss) from Operations	**2,440**	**14,965**	**(15,774)**	**4,022**	**(6,633)**	**6,771**

Note: Rounding may affect totals

Manitoba Public Insurance
Multi-year - Statement of Financial Position

-1.0 % rate change in 2016/17

(C$ 000s, except where noted)	*For the Years Ended February,*					
	2015A	2016P	2017P	2018P	2019P	2020P
BASIC						
Assets						
Cash and investments	1,593,442	1,556,669	1,538,094	1,527,427	1,593,750	1,667,269
Equity investments	598,842	614,624	624,601	631,737	659,166	689,394
Investment property	35,073	35,084	34,879	33,728	32,311	30,966
Due from other insurance companies	108	-	-	-	-	-
Accounts receivable	273,197	270,333	280,015	292,259	304,500	317,345
Prepaid expenses	-	291	291	291	291	291
Deferred policy acquisition costs	-	-	-	-	-	-
Reinsurers' share of unearned premiums	-	-	-	-	-	-
Reinsurers' share of unearned claims	2,565	-	-	-	-	-
Property and equipment	90,474	87,247	91,067	91,553	90,273	88,648
Deferred development costs	56,992	66,092	73,175	81,730	86,029	97,255
	2,650,693	**2,630,340**	**2,642,121**	**2,658,723**	**2,766,319**	**2,891,168**
Liabilities						
Due to other insurance companies	-	1	1	1	1	1
Accounts payable and accrued liabilites	34,157	37,993	39,354	41,074	42,795	44,600
Financing lease obligation	3,224	2,955	2,892	2,825	2,753	2,681
Unearned premiums and fees	426,137	461,757	480,544	504,967	529,893	556,200
Provision for employee current benefits	16,240	16,253	16,880	17,520	18,175	18,845
Provision for employee future benefits	286,581	289,816	303,510	318,434	334,015	350,309
Provision for unpaid claims	1,671,275	1,588,320	1,576,097	1,543,066	1,605,953	1,669,851
	2,437,614	**2,397,095**	**2,419,277**	**2,427,887**	**2,533,584**	**2,642,487**
Equity						
Retained earnings						
Basic Insurance Retained Earnings						
Rate Stabilization Reserve	165,600	178,300	177,007	181,029	174,396	181,168
Retained Earnings	12,217	14,481	-	-	-	-
	177,817	192,781	177,007	181,029	174,396	181,168
Accumulated Other Comprehensive Income	35,262	40,464	45,837	49,807	58,338	67,514
Total Equity	**213,079**	**233,245**	**222,844**	**230,836**	**232,735**	**248,682**
	2,650,693	**2,630,340**	**2,642,121**	**2,658,723**	**2,766,319**	**2,891,168**

Note: Rounding may affect totals

Manitoba Public Insurance
Multi-Year - Statement of Changes in Equity

-1.0 % rate change in 2016/17

(C$ 000s, except where noted)	*For the Years Ended February,*					
	2015A	2016P	2017P	2018P	2019P	2020P
RATE STABILIZATION RESERVE (RSR)						
Basic Insurance Rate Stabilization Reserve						
Beginning Balance	99,877	165,600	178,300	177,007	181,029	174,396
Transfer from Basic Retained Earnings	65,723	12,700	(1,293)	4,022	(6,633)	6,771
Ending Balance	**165,600**	**178,300**	**177,007**	**181,029**	**174,396**	**181,168**
Retained Earnings						
Beginning Balance	-	12,217	14,481	-	-	-
Net Income (Loss) from annual operations	2,440	14,964	(15,774)	4,022	(6,633)	6,771
Transfer from Non Basic Retained Earnings	75,500					
Retained Earnings Prior to Transfers	77,940	27,181	(1,293)	4,022	(6,633)	6,771
Transfer from (to) Rate Stabilization Reserve	(65,723)	(12,700)	1,293	(4,022)	6,633	(6,771)
Balance of Fund	**12,217**	**14,481**	**-**	**-**	**-**	**-**
Total Basic Retained Earnings	**$ 177,817**	**$ 192,781**	**$ 177,007**	**$ 181,029**	**$ 174,396**	**$ 181,168**
Total Accumulated Other Comprehensive Income	**$ 35,262**	**$ 40,464**	**$ 45,837**	**$ 49,807**	**$ 58,338**	**$ 67,514**
Total Equity	**$ 213,079**	**$ 233,245**	**$ 222,844**	**$ 230,836**	**$ 232,735**	**$ 248,682**

Minimum RSR based on PUB rules	82,900	89,300	92,600	97,100	101,600	106,400
Maximum RSR based on PUB rules	165,600	178,300	184,900	193,800	202,800	212,300
MPI Total Equity Target	213,000	213,000	213,000	213,000	213,000	213,000
MPI Max Target (MCT)	325,000	325,000	325,000	325,000	325,000	325,000

Note: Rounding may affect totals

Manitoba Public Insurance
Multi-year - Statement of Operations

2.61 % Rate increase required for 2016/17 approximate break even

(C$ 000s, except where noted)	*For the Years Ended February,*					
	2015A	**2016P**	**2017P**	**2018P**	**2019P**	**2020P**
BASIC						
Motor Vehicles	794,052	854,303	916,956	960,325	1,004,498	1,051,147
Drivers	44,642	48,269	51,128	54,021	56,626	59,164
Reinsurance Ceded	(13,829)	(12,396)	(12,644)	(12,897)	(13,155)	(13,418)
Total Net Premiums Written	**824,865**	**890,176**	**955,440**	**1,001,449**	**1,047,969**	**1,096,893**
Net Premiums Earned						
Motor Vehicles	774,785	828,135	888,073	940,332	984,134	1,029,642
Drivers	42,926	46,782	49,704	52,580	55,329	57,900
Reinsurance Ceded	(13,829)	(12,396)	(12,644)	(12,897)	(13,155)	(13,418)
Total Net Premiums Earned	**803,883**	**862,520**	**925,134**	**980,016**	**1,026,308**	**1,074,124**
Service Fees & Other Revenues	19,475	20,922	22,350	24,190	26,114	28,285
Total Earned Revenues	**823,357**	**883,443**	**947,484**	**1,004,205**	**1,052,422**	**1,102,409**
Net Claims Incurred	745,837	588,900	677,123	691,157	823,219	861,787
Claims Expense	116,578	121,045	128,107	131,338	136,816	136,659
Road Safety/Loss Prevention	11,359	11,496	11,444	10,551	11,404	11,427
Total Claims Costs	**873,774**	**721,441**	**816,674**	**833,046**	**971,440**	**1,009,873**
Expenses						
Operating	74,283	71,401	74,643	77,218	80,043	80,552
Commissions	32,845	35,405	37,103	38,064	39,790	41,573
Premium Taxes	24,531	26,247	28,133	29,787	31,184	32,626
Regulatory/Appeal	3,935	3,154	3,210	3,273	3,338	3,404
Total Expenses	**135,595**	**136,208**	**143,089**	**148,342**	**154,355**	**158,155**
Underwriting Income (Loss)	**(186,011)**	**25,795**	**(12,280)**	**22,817**	**(73,373)**	**(65,620)**
Investment Income	188,451	(10,830)	12,279	12,055	101,352	110,395
Net Income (Loss) from Operations	**2,440**	**14,965**	**(0)**	**34,872**	**27,980**	**44,776**

Note: Rounding may affect totals

Manitoba Public Insurance
Multi-year - Statement of Financial Position

2.61 % Rate increase required for 2016/17 approximate break even

(C$ 000s, except where noted) — *For the Years Ended February,*

	2015A	2016P	2017P	2018P	2019P	2020P
BASIC						
Assets						
Cash and investments	1,593,442	1,556,669	1,557,132	1,571,147	1,665,534	1,769,910
Equity investments	598,842	614,624	630,102	644,117	679,320	718,107
Investment property	35,073	35,084	34,989	33,934	32,602	31,337
Due from other insurance companies	108	-	-	-	-	-
Accounts receivable	273,197	270,333	287,858	300,466	313,078	326,316
Prepaid expenses	-	291	291	291	291	291
Deferred policy acquisition costs	-	-	-	-	-	-
Reinsurers' share of unearned premiums	-	-	-	-	-	-
Reinsurers' share of unearned claims	2,565	-	-	-	-	-
Property and equipment	90,474	87,247	91,067	91,553	90,273	88,648
Deferred development costs	56,992	66,092	73,175	81,730	86,029	97,255
	2,650,693	**2,630,340**	**2,674,614**	**2,723,236**	**2,867,126**	**3,031,864**
Liabilities						
Due to other insurance companies	-	1	1	1	1	1
Accounts payable and accrued liabilites	34,157	37,993	40,456	42,228	44,000	45,861
Financing lease obligation	3,224	2,955	2,892	2,825	2,753	2,681
Unearned premiums and fees	426,137	461,757	495,478	520,595	546,228	573,283
Provision for employee current benefits	16,240	16,253	16,880	17,520	18,175	18,845
Provision for employee future benefits	286,581	289,816	303,510	318,434	334,015	350,309
Provision for unpaid claims	1,671,275	1,588,320	1,576,073	1,542,237	1,604,572	1,667,854
	2,437,614	**2,397,095**	**2,435,290**	**2,443,839**	**2,549,744**	**2,658,834**
Equity						
Retained earnings						
Basic Insurance Retained Earnings						
Rate Stabilization Reserve	165,600	178,300	191,300	200,500	209,800	219,600
Retained Earnings	12,217	14,481	1,481	27,152	45,832	80,808
	177,817	192,781	192,781	227,652	255,632	300,408
Accumulated Other Comprehensive Income	35,262	40,464	46,544	51,745	61,750	72,622
Total Equity	213,079	233,245	239,324	279,397	317,382	373,030
	2,650,693	**2,630,340**	**2,674,614**	**2,723,236**	**2,867,126**	**3,031,864**

Note: Rounding may affect totals

Manitoba Public Insurance
Multi-Year - Statement of Changes in Equity

2.61 % Rate increase required for 2016/17 approximate break even

(C$ 000s, except where noted)	*For the Years Ended February,*					
	2015A	2016P	2017P	2018P	2019P	2020P
RATE STABILIZATION RESERVE (RSR)						
Basic Insurance Rate Stabilization Reserve						
Beginning Balance	99,877	165,600	178,300	191,300	200,500	209,800
Transfer from Basic Retained Earnings	65,723	12,700	13,000	9,200	9,300	9,800
Transfer to Basic Retained Earnings	-	-	-	-	-	-
Ending Balance	**165,600**	**178,300**	**191,300**	**200,500**	**209,800**	**219,600**
Retained Earnings						
Beginning Balance	-	12,217	14,481	1,481	27,152	45,832
Net Income (Loss) from annual operations	2,440	14,964	(0)	34,872	27,980	44,776
Transfer from Non Basic Retained Earnings	75,500					
Retained Earnings Prior to Transfers	77,940	27,181	14,481	36,352	55,132	90,608
Transfer from (to) Rate Stabilization Reserve	(65,723)	(12,700)	(13,000)	(9,200)	(9,300)	(9,800)
Balance of Fund	**12,217**	**14,481**	**1,481**	**27,152**	**45,832**	**80,808**
Total Basic Retained Earnings	**$ 177,817**	**$ 192,781**	**$ 192,781**	**$ 227,652**	**$ 255,632**	**$ 300,408**
Total Accumulated Other Comprehensive Income	**$ 35,262**	**$ 40,464**	**$ 46,544**	**$ 51,745**	**$ 61,750**	**$ 72,622**
Total Equity	**$ 213,079**	**$ 233,245**	**$ 239,324**	**$ 279,397**	**$ 317,382**	**$ 373,030**

Minimum RSR based on PUB rules	82,900	89,300	95,800	100,400	105,100	110,000
Maximum RSR based on PUB rules	165,600	178,300	191,300	200,500	209,800	219,600
MPI Total Equity Target	213,000	213,000	213,000	213,000	213,000	213,000
MPI Max Target (MCT)	325,000	325,000	325,000	325,000	325,000	325,000

Note: Rounding may affect totals

PUB (MPI) 1-35

Volume:	**I**	**Page No.:**	**LP.2.1, pages 8-9**
Topic:	**Road Safety and Loss Prevention**		
Sub Topic:	**Loss Prevention Governance Framework**		
Issue:	**IBM report**		

Preamble: IBM provided conclusions and recommendations to MPI relative to its Loss Prevention Governance Framework in each of the following areas: stage gate process, management, evaluation, and implementation. MPI has advised that these conclusions and recommendations are being reviewed for implementation during the current fiscal year.

Question:

a) Please advise of whether the Corporation accepts or rejects each of the conclusions and recommendations of IBM.

b) For each of the conclusions and recommendations which the Corporation accepts, please advise of when implementation is expected to take place, and any resultant cost consequences.

c) For each of the conclusions and recommendations which the Corporation rejects (if any), please advise of why the Corporation has done so.

Rationale for Question:

Road Safety and Loss Prevention costs are incurred with a view to reducing collisions, and in turn claims costs, and have a dual impact upon Basic Rates; as both expenditures and a potential savings mechanism. The Board must be provided with sufficient information relative to those initiatives to enable the Board to consider necessity and prudency of the expenditures and potential savings.

RESPONSE:

a) The Corporation accepts the recommendations and conclusions as provided by IBM.

b) Implementation of the Loss Prevention Strategy and Framework is underway and is anticipated to be implemented within existing operating budgets. New loss prevention programs or new initiatives within existing programs stemming from the new Framework, have not yet been identified and therefore not costed.

c) No recommendations have been rejected.

PUB (MPI) 1-36

Volume:	I	Page No.:	LP.2.2, pages 10-11
Topic:	Road Safety and Loss Prevention		
Sub Topic:	External Stakeholder Committee on Loss Prevention		
Issue:	Progress of Committee		

Preamble: The Terms of Reference of the External Stakeholder Committee on Loss Prevention were established on March 26, 2015, and provide that the committee is permanent, meeting at least quarterly. In addition, MPI will provide the resources required to support the activities of the Committee.

Question:
Please provide a summary of the discussions and progress of the Committee to date.

Rationale for Question:
Road Safety and Loss Prevention costs are incurred with a view to reducing collisions, and in turn claims costs, and have a dual impact upon Basic Rates; as both expenditures and a potential savings mechanism. The Board must be provided with sufficient information relative to those initiatives to enable the Board to consider necessity and prudency of the expenditures and potential savings.

RESPONSE:
The External Stakeholder Committee on Loss Prevention has met to review Terms of Reference for the Committee, and to review the Loss Prevention Strategy, Framework and plans for its implementation. The next meeting of the Committee is scheduled for September, 2015 when discussions will commence on loss prevention issues, priorities and activities of interest to member organizations.

PUB (MPI) 1-37

Volume:	**I**	**Page No.:**	**LP.4.1, pages 18-22**
Topic:	**Road Safety and Loss Prevention**		
Sub Topic:	**High School Driver Education Program & Graduated Driver Licensing Program**		
Issue:	**Program Effectiveness**		

Preamble: MPI has provided its internal reports on the Analysis of Young Drivers, comparing Graduated Driver License (GDL) drivers with pre-GDL young drivers and comparing High School Driver Education (HSDE) participants with non-HSDE participants.

Question:

Please provide the Corporation's position regarding whether the conclusions within either or both of these two internal reports are expected to lead to changes or improvements to the HSDE program or the GDL program, and if so the expected resultant costs and benefits of those changes.

Rationale for Question:

Road Safety and Loss Prevention costs are incurred with a view to reducing collisions, and in turn claims costs, and have a dual impact upon Basic Rates; as both expenditures and a potential savings mechanism. The Board must be provided with sufficient information relative to those initiatives to enable the Board to consider necessity and prudency of the expenditures and potential savings.

RESPONSE:

The Graduated Driver Licencing Report and High School Driver Education Report demonstrate that both programs are effective in decreasing convictions and collisions, independently and collectively. Notwithstanding the effectiveness of both programs, the Corporation believes additional improvements can be made to the High School Driver Education program to enhance its effectiveness, and is therefore continuing work on program redevelopment as outlined in Vol I Loss Prevention/Road Safety LP.4.2 and Vol III AI. 13.

PUB (MPI) 1-38

Volume:	I	Page No.:	LP.4.2, Page 25
Topic:	Road Safety and Loss Prevention		
Sub Topic:			
Issue:	HDSE Program Redevelopment		

Preamble: MPI has stated that an implementation plan, implementation roadmap and costing for the multi-year redevelopment are under development.

Question:
Please advise of whether the Corporation has identified an estimate, or estimate range of each of the costs and potential savings of the HDSE program redevelopment, in addition to the two expected benefits referenced at ITS.3.1.9, Page 72.

Rationale for Question:
Road Safety and Loss Prevention costs are incurred with a view to reducing collisions, and in turn claims costs, and have a dual impact upon Basic Rates; as both expenditures and a potential savings mechanism. The Board must be provided with sufficient information relative to those initiatives to enable the Board to consider necessity and prudency of the expenditures and potential savings.

RESPONSE:
As indicated, the Corporation is considering the range of costs and potential savings as they relate to the timing of initiatives and budgeting requirements associated with the HSDE program redevelopment. As such, estimates for specific program redevelopment activities are not available at this time. The Corporation expects to complete its analysis and begin launching redevelopment initiatives in the 2016/17 fiscal year.

PUB (MPI) 1-39

Volume:	**I**	**Page No.:**	**LP.5**
Topic:	**Road Safety and Loss Prevention**		
Sub Topic:			
Issue:	**Proposed Expense Forecasts**		

Preamble: The Corporation has filed considerable information relative to developments within Loss Prevention and Road Safety, including but not limited to a Loss Prevention Governance Framework, HDSE Program Redevelopment, a three-year Road Safety Operational Plan (2014-2017), and the implementation of a Provincial Road Safety Leadership Committee. Despite these and other developments, the actual and forecast expenses for Loss Prevention and Road Safety remain very similar from 2014/15 through 2019/20, subject to variability arising from an anticipated decrease in immobilizer incentives.

Question:

Please provide the rationale for maintaining the dollar level of the Loss Prevention and Road Safety budget throughout the outlook period, as opposed to increasing the budget.

Rationale for Question:

Road Safety and Loss Prevention costs are incurred with a view to reducing collisions, and in turn claims costs, and have a dual impact upon Basic Rates; as both expenditures and a potential savings mechanism. The Board must be provided with sufficient information relative to those initiatives to enable the Board to consider necessity and prudency of the expenditures and potential savings.

RESPONSE:

A primary objective in the creation of the Operational Plan and related frameworks was to establish a formalized process whereby the setting of priorities, evaluation of existing programs and development of new programs is completed in accordance with best practice and supports evidence-based decision making. Now that these frameworks have been implemented, they will be used to determine the need for program modifications, and associated changes in funding requirements, if any, and will be reflected in future year budgets.

PUB (MPI) 1-40

Volume:	**I and II**	**Page No.:**	**LP, Attachment A, E, Appendix 10**
Topic:	**Ratemaking**		
Sub Topic:			
Issue:	**Requested Rate**		

Preamble: LP, Attachment A provides that 2014/15 actual Road Safety and Loss Prevention expenses were $11,359,000. E, Appendix 10 provides that 2014/15 actual Road Safety and Loss Prevention expenses were $9,346,000.

Question:

a) Please confirm that the apparent difference in actual Road Safety and Loss Prevention expenses of $2,013,000 represents internal, departmental operating costs for the Road Safety and Driver Education Department, which are not included in E, Appendix 10.

b) Please confirm that the same reason applies to the apparent differences in the total expense forecasts for 2015/16 and subsequent years.

Rationale for Question:

Road Safety and Loss Prevention costs are incurred with a view to reducing collisions, and in turn claims costs, and have a dual impact upon Basic Rates; as both expenditures and a potential savings mechanism. The Board must be provided with sufficient information relative to those initiatives to enable the Board to consider necessity and prudency of the expenditures and potential savings.

RESPONSE:

a) Confirmed.

b) Confirmed.

PUB (MPI) 1-41

Volume:	**II**	**Page No.:**	**CI.5, Page 30**
Topic:	**Claims Incurred**		
Sub Topic:	**Collision**		
Issue:	**Requested Rate and Claims Forecasting**		

Preamble: "2014/15 resulted in the lowest Total Frequency in the last 10 years. The Corporation does not believe that this recent experience is reflective of long-term best estimate assumptions."

Question:

a) Please provide additional background and insight into the unusually low Collision Total Frequency experienced in 2014/15 (e.g., root causes, composition, etc.).

b) By substitution with a more "normal" 2014/15 Collision Total Frequency (in line with recent prior years), please illustrate the estimated impact this year of experience has on the forecasted claims incurred and overall rate requirement.

Rationale for Question:

To assess forecasting accuracy.

RESPONSE:

a) The Corporation believes that the low Collision Total Frequency experienced in 2014/15 is a result of both the implementation of the DSR scale and better than normal winter weather conditions.

The table below is from Vol II Claims Incurred CI.5 page 31.

Ultimate Collision Repair Frequency by Month

Accident Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2010/11	0.180	0.144	0.093	0.084	0.085	0.098	0.086	0.086	0.096	0.100	0.131	0.144
2011/12	0.133	0.102	0.127	0.091	0.087	0.094	0.085	0.087	0.095	0.096	0.118	0.107
2012/13	0.168	0.138	0.101	0.080	0.087	0.095	0.084	0.085	0.089	0.101	0.128	0.145
2013/14	0.175	0.149	0.123	0.095	0.083	0.085	0.079	0.077	0.080	0.084	0.119	0.168
2014/15	0.116	0.144	0.121	0.080	0.073	0.077	0.078	0.070	0.077	0.078	0.106	0.102

Collision repair frequency has declined in a majority of the months as shown since DSR was implemented. In addition, over 50% of collision claims occur in the winter months. These claims are highly variable based on weather conditions, road conditions, and how early or late the winter season begins. Because of this, the Corporation selects a longer term trend that is not too dependent on the current year results. A graphical presentation of the historical and selected collision frequency trend is provided on page 32 of the Claims Incurred section. As shown in the graph, the Corporation is forecasting a decreasing frequency of collision repair claims and an increasing frequency of total loss claims.

b) The Corporation estimates that if 2014/15 had a higher frequency using recent year averages, this would increase the forecasted frequency by approximately 3.00%. This increase in frequency would be an impact of approximately $9 million or a required rate increase of 1.00%.

PUB (MPI) 1-42

Volume:	**II**	**Page No.:**	**CI.5, Pages 33-36**
Topic:	**Claims Incurred**		
Sub Topic:	**Collision**		
Issue:	**Requested Rate and Claims Forecasting**		

Question:

a) Please document the derivation of the six severity amounts shown for accident years 2013/14 and 2014/15 in the graph on Page 36.

b) Please provide a revised graph from Page 36 showing actual historical severity amounts for accident years 2013/14 and 2014/15.

Rationale for Question:

To assess forecasting accuracy.

RESPONSE:

a) The figures shown in the graph are the actual historical severity amounts which can be found in the table on Page 33. For 2013/14 and 2014/15 the graph shows the actual severity amounts while the table is adjusted for the PST increase. See footnote on Page 33 for details.

b) See part (a).

PUB (MPI) 1-43

Volume:	**II**	**Page No.:**	**INV.13.2, Page 66**
Topic:	**Interest Rate Forecasting**		
Sub Topic:			
Issue:	**Interest Rate Forecasting Methodology**		

Preamble: With respect to the forecasting of Government of Canada 10 year bond rates, as a result of moving from relying on an average of six forecasts for 2016Q4 (2.70%) to relying on a single forecast for 2017Q1 (3.22%), a meaningful interest rate increase is being forecasted over 2017Q1.

Question:

a) Please provide a restated PF.1, PF.2 and PF.3 based on a revised interest rate forecast in which the Government of Canada 10 year bond rates for 2017Q1 onwards are reduced by 0.37 percentage points (the difference between the Global Insight 2016Q4 forecast of 3.07% and the selected average 2016Q4 forecast of 2.70%).

b) Please provide the estimated overall required rate change that would correspond to the revised interest rate forecast in a) above.

Rationale for Question:

To assess the reasonableness of the interest rate forecast.

RESPONSE:

a) Please see attached.

- The forecasted interest rate decrease of 0.37% in 2017/18 reduced basic net income in this scenario by $12.9 million.
- In 2018/19 and 2019/20 interest rates remain flat, but are 0.37% lower on an absolute basis than the 2016 GRA forecast (3.18% vs. 3.55%).

- As a result, Basic net income is lower on average in 2018/19 and 2019/20 by $8.1 million, primarily due to lower marketable and MUSH bond income from the lower interest rate.

b) If the interest rate forecast were changed as per part (a), the estimated rate increase required would be approximately 1%.

Manitoba Public Insurance
Multi-year - Statement of Operations
For the Years Ended February,

Government of Canada 10 year Bond rate forecast reduced by 0.37 bps commencing 2017 Q1

(C$ 000s, except where noted)	*For the Years Ended February,*					
	2015A	2016P	2017P	2018P	2019P	2020P
BASIC						
Motor Vehicles	794,052	854,303	893,543	935,826	978,889	1,024,366
Drivers	44,642	48,269	51,128	54,021	56,626	59,164
Reinsurance Ceded	(13,829)	(12,396)	(12,644)	(12,897)	(13,155)	(13,418)
Total Net Premiums Written	**824,865**	**890,176**	**932,027**	**976,950**	**1,022,361**	**1,070,112**
Net Premiums Earned						
Motor Vehicles	774,785	828,135	875,453	916,334	959,037	1,003,401
Drivers	42,926	46,782	49,704	52,580	55,329	57,900
Reinsurance Ceded	(13,829)	(12,396)	(12,644)	(12,897)	(13,155)	(13,418)
Total Net Premiums Earned	**803,883**	**862,520**	**912,514**	**956,017**	**1,001,211**	**1,047,884**
Service Fees & Other Revenues	19,475	20,922	22,350	24,052	25,965	28,125
Total Earned Revenues	**823,357**	**883,443**	**934,864**	**980,069**	**1,027,176**	**1,076,008**
Net Claims Incurred	745,837	588,900	677,141	734,480	826,818	865,391
Claims Expense	116,578	121,045	128,107	131,338	137,068	136,798
Road Safety/Loss Prevention	11,359	11,496	11,444	10,551	11,427	11,438
Total Claims Costs	**873,774**	**721,441**	**816,693**	**876,370**	**975,313**	**1,013,627**
Expenses						
Operating	74,283	71,401	74,643	77,218	80,189	80,625
Commissions	32,845	35,405	36,774	37,290	38,981	40,727
Premium Taxes	24,531	26,247	27,755	29,067	30,431	31,839
Regulatory/Appeal	3,935	3,154	3,210	3,273	3,338	3,404
Total Expenses	**135,595**	**136,208**	**142,382**	**146,849**	**152,940**	**156,596**
Underwriting Income (Loss)	**(186,011)**	**25,794**	**(24,210)**	**(43,149)**	**(101,077)**	**(94,215)**
Investment Income	188,451	(10,830)	12,809	42,861	96,524	102,722
Net Income (Loss) from Operations	**2,440**	**14,964**	**(11,401)**	**(287)**	**(4,552)**	**8,507**

Note: Rounding may affect totals

Manitoba Public Insurance
Multi-year - Statement of Financial Position

Govermnent of Canada 10 year Bond rate forecast reduced by 0.37 bps commencing 2017 Q1

(C$ 000s, except where noted)	*For the Years Ended February,*					
	2015A	**2016P**	**2017P**	**2018P**	**2019P**	**2020P**
BASIC						
Assets						
Cash and investments	1,593,442	1,556,669	1,543,372	1,564,449	1,634,931	1,712,262
Equity investments	598,842	614,624	626,127	641,613	670,365	701,835
Investment property	35,073	35,084	34,910	33,800	32,403	31,078
Due from other insurance companies	108	-	-	-	-	-
Accounts receivable	273,197	270,333	282,190	294,535	306,878	319,832
Prepaid expenses	-	291	291	291	291	291
Deferred policy acquisition costs	-	-	-	-	-	-
Reinsurers' share of unearned premiums	-	-	-	-	-	-
Reinsurers' share of unearned claims	2,565	-	-	-	-	-
Property and equipment	90,474	87,247	91,067	91,553	90,273	88,648
Deferred development costs	56,992	66,092	73,175	81,730	86,029	97,255
	2,650,693	**2,630,340**	**2,651,131**	**2,707,970**	**2,821,170**	**2,951,201**
Liabilities						
Due to other insurance companies	-	1	1	1	1	1
Accounts payable and accrued liabilites	34,157	37,993	39,659	41,394	43,129	44,950
Financing lease obligation	3,224	2,955	2,892	2,825	2,753	2,681
Unearned premiums and fees	426,137	461,757	484,685	509,301	534,423	560,937
Provision for employee current benefits	16,240	16,253	16,880	17,520	18,175	18,845
Provision for employee future benefits	286,581	289,816	303,510	318,434	334,015	350,309
Provision for unpaid claims	1,671,275	1,588,320	1,576,091	1,585,579	1,651,513	1,718,399
	2,437,614	**2,397,095**	**2,423,718**	**2,475,053**	**2,584,008**	**2,696,121**
Equity						
Retained earnings						
Basic Insurance Retained Earnings	165,600	178,300	181,380	181,092	176,540	185,047
Rate Stabilization Reserve	12,217	14,481	-	-	-	-
Retained Earnings	177,817	192,781	181,380	181,092	176,540	185,047
Accumulated Other Comprehensive Income	**35,262**	**40,464**	**46,033**	**51,825**	**60,621**	**70,033**
Total Equity	**213,079**	**233,245**	**227,413**	**232,917**	**237,161**	**255,080**
	2,650,693	2,630,340	2,651,131	2,707,970	2,821,170	2,951,201

Note: Rounding may affect totals

Manitoba Public Insurance
Multi-year - Statement of Changes in Equity

Govermnent of Canada 10 year Bond rate forecast reduced by 0.37 bps commencing 2017 Q1

(C$ 000s, except where noted)	For the Years Ended February,					
	2015A	2016P	2017P	2018P	2019P	2020P
RATE STABILIZATION RESERVE (RSR)						
Basic Insurance Rate Stabilization Reserve						
Beginning Balance	99,877	165,600	178,300	181,380	181,092	176,540
Transfer from (to) Basic Retained Earnings	65,723	12,700	3,080	(287)	(4,552)	8,507
Transfer to Basic Retained Earnings	-	-	-	-	-	-
Ending Balance	**165,600**	**178,300**	**181,380**	**181,092**	**176,540**	**185,047**
Retained Earnings						
Beginning Balance	-	12,217	14,481	-	-	-
Net Income (Loss) from annual operations	2,440	14,964	(11,401)	(287)	(4,552)	8,507
Transfer from Non Basic Retained Earnings	75,500					
Retained Earnings Prior to Transfers	77,940	27,181	3,080	(287)	(4,552)	8,507
Transfer from (to) Rate Stabilization Reserve	(65,723)	(12,700)	(3,080)	287	4,552	(8,507)
Balance of Fund	**12,217**	**14,481**	**-**	**-**	**-**	**-**
Total Basic Retained Earnings	**$ 177,817**	**$ 192,781**	**$ 181,380**	**$ 181,092**	**$ 176,540**	**$ 185,047**
Total Accumulated Other Comprehensive Income	**$ 35,262**	**$ 40,464**	**$ 46,033**	**$ 51,825**	**$ 60,621**	**$ 70,033**
Total Equity	**$ 213,079**	**$ 233,245**	**$ 227,413**	**$ 232,917**	**$ 237,161**	**$ 255,080**
Minimum RSR based on PUB rules	82,900	89,300	93,500	98,000	102,600	107,400
Maximum RSR based on PUB rules	165,600	178,300	186,700	195,700	204,800	214,300
MPI Total Equity Target	213,000	213,000	213,000	213,000	213,000	213,000
MPI Max Target (MCT)	325,000	325,000	325,000	325,000	325,000	325,000

Note: Rounding may affect totals

PUB (MPI) 1-44

Volume:	**II**	**Page No.:**	**RM.5.2, Page 44**
Topic:	**Ratemaking**		
Sub Topic:			
Issue:	**Requested Rate**		

Preamble: The forecasted level of investment income jumps from under $13 million in each of 2016/17 and 2017/18, up to over $100 million in each of 2018/19 and 2019/20.

Question:
Please confirm that the most significant contributor to this jump in the level of forecasted investment income (from 2017/18 to 2018/19) is the change from forecasting increasing interest rates in 2017/18 to a flat interest rate forecast starting in 2018/19.

Rationale for Question:
To assess the reasonableness of the forecasted level of investment income.

RESPONSE:
Yes, the most significant contributor to the jump in forecasted investment income from 2017/18 to 2018/19 is a change from a rising interest rate forecast in 2017/18 to a flat interest rate forecast starting in 2018/19. This difference is shown in Vol II Investment Income page 5 in the marketable bonds unrealized and realized gains/(loss) rows.

PUB (MPI) 1-45

Volume:	II	Page No.:	INV.13, Page 64
Topic:	Investment Income		
Sub Topic:			
Issue:	Interest Rate Forecasting		

Question:

a) Please explain why MPI utilizes only one long term interest rate forecaster.

b) Please explain how the dependence on one long term interest rate forecaster impacts the forecast used for 2016/17 and 2017/18.

c) Please provide a line graph of the forecasts and that used in the analysis.

d) Has the Corporation considered obtaining forecasts from Nesbitt Burns, the Conference Board of Canada, Spatial Economics, to name a few, who provide longer term interest rate forecasts. If not, why not? Explain.

Rationale for Question:

Interest rate forecasting is an important variable for rate setting.

RESPONSE:

a) In Board Order 151/13, there was analysis on the interest rate forecasting methodology in the 2015 GRA Investment Income document (II.1.3 Interest Rate Methodology). This discussion from last year's document is included below.

   There is a lack of interest rate forecasters that provide quarterly forecasts of the Government of Canada 10 year bond rate for outlook periods longer than two years. Other forecasters were considered but were rejected for various reasons:

- The Conference Board of Canada provides a long-term forecast that is updated on a quarterly basis rather than on a monthly basis. When the interest rate methodology was being reviewed internally in March 2014, the Conference Board of Canada's March 2014 forecast was delayed. Their March forecast only became available after the methodology was finalized. This illustrates the importance of regular interest rate forecasts. The Conference Board of Canada's December 2013 forecast was dated as interest rates declined significantly in January (GoC 10-year bond rate was 2.76% as of December 31, 2013). By January 31, 2014, the GoC 10-year bond rate fell by 0.42% to 2.34% due to changing market conditions. Internally, current interest rate forecasts are preferred to stale forecasts especially when the market is volatile. This situation was especially true in early 2009 when the interest rate forecast was updated on a frequent basis to deal with the rapidly changing interest rate environment.

- Spatial Economics provides a semi-annual forecast.

- Informetrica is no longer in business.

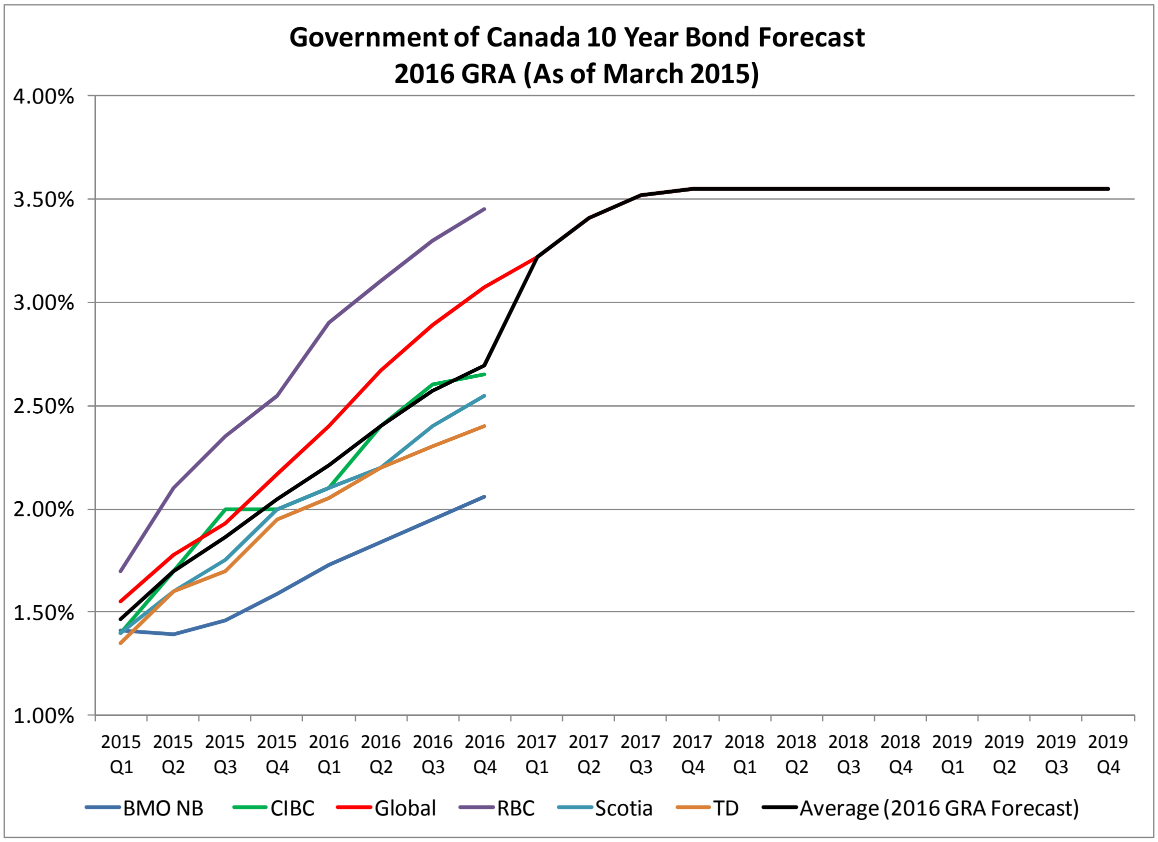
- Some of the major banks provide long-term forecasts. However, these are not approved for public disclosure, and are not available on a regular basis.

b) If there were more suitable long-term interest rate forecasts available, including these forecasts would impact the average interest rate forecast from 2017/18 to 2019/20. The bullet points below provide a sensitivity analysis:

- If the average forecasted interest rate was increased/decreased by +10 bps/-10 bps starting in 2017/18, the impact on Basic net income would be $3.1 million/-$3.6 million in 2017/18. On average over the rating years, the Basic net income impact would be approximately $1.6 million/-$1.8 million.

- If the average forecasted interest rate was increased or decreased by +20 bps/-20 bps, the impact on basic net income would be $6.9 million/-$7.1 million in 2017/18. On average over the rating years, the Basic net income impact would be approximately $3.5 million/-$3.6 million.

c) Please see the chart below.



d) Yes, the Corporation considered the forecasters listed in the question during last year's interest rate methodology review. The Corporation uses interest rate forecasts that are provided on a monthly basis and approved for public disclosure. The forecasts listed in the question as of last year did not meet this criteria, as discussed in (a).

PUB (MPI) 1-46

Volume:	**II**	**Page No.:**	**INV.6, Page 34, Attachment G**
Topic:	**Investment Income**		
Sub Topic:	**Investment Return Assumptions**		
Issue:	**US Equity Returns**		

Preamble: MPI is basing the total equity returns forecast to equal the Canadian Equity Returns. MPI does not forecast realizing any gains on the US Equity Portfolio.

Question:

a) To attempt to understand the reasonableness of using the equity return 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.

d) Please discuss why MPI is forecasting no realized US equity gains in the next five years, given MPI has a $55.6 million in unrealized gains on its US Investments.

Rationale for Question:

Investment income is important for rate-setting.

RESPONSE:

a) The historical returns for the U.S. Equities market are provided in the table below. Please note that the S&P 500 Total Return series is available from 1988, whereas the S&P TSX total return index is available from 1956. The 5th percentile 20-year return of the S&P 500 Total Return Index is 7.7%, which is comparable to the 7.4% 20-year return for the S&P TSX.

S&P 500 Total Return Rolling Returns from 1988 to Present

Percentile	5 Year Annualized	10 Year Annualized	20 Year Annualized
Min	-6.6%	-3.4%	7.1%
1%	-3.9%	-2.6%	7.4%
5%	**-2.2%**	**-0.9%**	**7.7%**
10%	-1.5%	-0.2%	7.8%
20%	0.3%	3.5%	8.1%
25%	0.7%	5.2%	8.2%
50%	10.1%	8.5%	8.7%
Max	28.6%	19.5%	11.2%

January 31, 1988 to June 30, 2015

b) The annual total returns for the last five years are provided in the table below.

Annual Returns (%)

	S&P 500	Russell 3000
2010	15.1%	16.9%
2011	2.1%	1.0%
2012	16.0%	16.4%
2013	32.4%	33.6%
2014	13.7%	12.6%

c) The impact of using a 7.7% U.S. equity return instead of the forecasted 7.4% is $0.2 million on average over the rating years.

d) There are $2.5 million dollars of annual U.S. equity realized gains on average over the five-year forecast. These realized gains are shown on the Summary of Investment Income on page 5 and Table 6.1 of the Investment Income document.

The U.S. equity portfolio requires continual rebalancing due to dollar matching of the fixed income portfolio to the claims liabilities. This ongoing dollar matching causes the U.S. equity portfolio to go over the maximum allocation, which causes the U.S. equity portfolio to realize a relatively small amount of gains every year. Please see Vol II Investment Income INV.10.3 *Rebalancing Assumptions Applied in the GRA Forecast* for further discussion.

PUB (MPI) 1-47

Volume:	II	Page No.:	INV.9, Page 45
Topic:	Investment Income		
Sub Topic:			
Issue:	Pension Expense		

Preamble: It appears that the pension discount rate has been established at 3.6% based on a February 2015 actuarial valuation, and is based on yields on high quality corporate bonds. MPI is forecasting changes to long-term interest rates. It is not clear whether the discount rate is forecasted to change, impacting the forecast pension expense

Question:
Please explain how the changes in interest rate assumptions that are impacting the investment returns in 2015/16, 2016/17 and 2018/19 factor into the determination of a forecast discount rate for the pension liability expense in each year.

Rationale for Question:
To understand the impact of interest rate forecast changes on investment income.

RESPONSE:
The interest rate forecast and the pension discount rate utilize two different sources. The interest rate forecast is based on GOC 10-year bond rate whereas the pension liability expense uses a rate provided in consultation with an external actuary and is based on the estimated return of a Corporate AA bond of similar duration to the pension liabilities. The pension discount rate of 3.6% is static throughout the forecast period.

PUB (MPI) 1-48

Volume:	**II**	**Page No.:**	**INV, Attachment A**
Topic:	**Investments**		
Sub Topic:			
Issue:	**Investment Policy Statement**		

Question:

a) For each substantive change made to the investment policy statement, please indicate the reasons for the change in the ISP. With respect to changes tied to the AON recommendations, please reference and explain the recommendation and how the change addresses the recommendation.

b) Please explain why the target asset allocation Section VII in the investment policy statement has not changed given the recommendations made by AON.

Rationale for Question:

To understand how the management of the Investment Portfolio changes, and the impact on returns.

RESPONSE:

a) Please see the attached table which lists all substantive changes to the investment policy statement, reasons for the changes and references within the Vol II Attachment A Investment Policy Statement and the relevant Aon Hewitt document.

b) The target asset allocation in Vol II Investment Income Attachment A Investment Policy Statement Section 7.1 was changed as per the recommendations made by AON Hewitt (ie: 70/15/15 allocation to bonds/equities/alternative assets), as was explained in Vol II Investment Income INV.17 Appendix 5. The changes did not appear as changes in the blacklined version of the Investment Policy Statement because the changes to the table in Section 7.1 were inadvertently accepted before the document was filed.

Summary of Changes to Investment Policy Statement

#	Change	IPS Section Reference	Reason for the change	Source for the change	Reference - Aon's Document
1	Addition of a paragraph that defines short-tem volatility as a primary concern and the relative value of assets and liabilities as major investment objective	General Policy Statement	The risk definition was broadened to reflect the new focus on liability-driven asset management	AON's IPS Review	General Policy Statement-Page 2
2	Addition of a section that addresses the benefits to the Corporation from investing in MUSH bonds	Statement of Investment Beliefs	Lack of explicit belief regarding investment in MUSH bonds	AON's IPS Review	Statement of Investment Beliefs-Page 2
3	Modification of second paragraph to address the way fixed income assets will be managed in relation to claims liabilities	Investment Fund Strategy Statement-Fixed Income	Modification to reflect the changes on the direction taken on active management of duration	AON's IPS Review and Investment Department	Investment Fund Strategy Statement-Fixed Income-Page 2
4	Modification of paragraph to reflect gender neutral wording	Section III-Conflict of Interest-Section 3.3	Adoption of gender neutral wording	AON's IPS Review	Section III-Conflict of Interest-Section 3.3-Page 3
5	Expansion of section in regard to related party transactions	Section III-Section 3.5	Adoption of a more comprehensive prohibition on related party transactions	AON's IPS Review	Section III-Section 3.5-Page 3
6	Expansion of the definition of liabilities	Section IV-Liabilities Characteristics-Section 4.2	Narrow scope of liability definition that was specific to insurance without reference to pension liabilities	AON's IPS Review	Section IV-Liabilities Characteristics-Section 4.2-Page 3
7	Removal of section 4.4 and replacement with a separate withdrawal policy in Section XI		Reorganization of sections and addition of separate withdrawal policy as recommended by AON	Investment Department	
8	Change in wording	Section V-Investment Objectives-Section 5.1	Provision of more clear wording	Investment Department	

#	Change	IPS Section Reference	Reason for the change	Source for the change	Reference - Aon's Document
9	Addition of a risk definition	Section V-Investment Objectives-Section 5.3	Addition of a section to address risk relative to liabilities given the new focus on liability-driven asset management	AON's IPS Review	Section V-Investment Objectives-Section 5.2-Page 3
10	Addition of timeframes to measure and monitor investment managers	Section V-Section 5.5	The change was aimed to reflect industry best practices in regard to investment objectives and ongoing evaluation and monitoring practice by Investment Department	AON's IPS Review and Investment Department practice	Section V-Section 5.5-Page 3
11	Modification of benchmark name for cash and short term Canadian bonds	Section V-Section 5.5	Update to reflect new naming convention for DEX indices as a result of changes in indices provider ownership (FTSE)	AON's IPS Review	Section V-Section 5.5-Page 3
12	Modification of benchmark for marketable bonds	Section V-Section 5.5	The benchmark was changed to reflect the new liability-driven asset management	Investment Department	Section V-Section 5.5-Page 3
13	Removal of real return bonds as an asset class	Section V-Section 5.5	Lack of effective exposure to real return bonds	Investment Department	Section V-Section 5.5-Page 3
14	Addition of investment in infrastructure pooled funds as a permitted investment	Section VI-Permitted Investments-Section 6.3	To align with previously permitted investments in section 6.9	AON's IPS Review	Section VI-Permitted Investments-Section 6.3-Page 4
15	Merger of sections 6.10 and 6.11 into a single section 6.10 (Private Equity)	Section VI-Section 6.10	Private Equity is a more general and inclusive classification for the asset class	AON's IPS Review	Section VI-Section 6.10-Page 4
16	Expansion of use of leverage to include infrastructure investments	Section VI-Section 6.12	Infrastructure investments commonly use some form of leverage	AON's IPS Review	Section VI-Section 6.13-Page 4
17	Modification of asset allocation targets and ranges	Section VII-Asset Allocation (Table 7.1)	Changes in asset allocation targets and ranges in accordance to results from ALM study	AON's IPS Review and Investment Department research	Section VII-Asset Allocation-Page 4

#	Change	IPS Section Reference	Reason for the change	Source for the change	Reference - Aon's Document
18	Maximum allocation to Canadian and U.S Small to Mid Cap equity asset classes	Section VII-Section 7.3 & 7.4	Clarification of wording and inclusion of an investment upper limit tied to the actual equity investments	Investment Department	
19	Addition of target allocation to illiquid growth assets as proportion of total growth assets	New section 7.5	Avoidance of a potentially significantly unbalanced portfolio	AON's Report Phase II-Part A	Page 120
20	Upper limit to actual allocation to MUSH bonds	New section 7.6	Avoidance of excessive concentration in illiquid assets	AON's Report Phase II-Part A	Page 120
21	Duration matching of assets to duration of claims liabilities	Section VIII-Investment Risk-Section 8.4	To reduce the sensitivity of the Corporation to changes in interest rates	AON's IPS Review	Section VIII-Investment Risk-Section 8.4-Page 5
22	Addition of a course of action in the event of a downgrade of a fixed income security	Section VIII-Section 8.7	Provide greater clarity in the event of a downgrade in the credit rating of a fixed income security	AON's IPS Review	Section VIII-Section 8.6-Page 5
23	Update of benchmark for fixed income - new name for cash & short-term and a liability based benchmark for fixed income	Section X-Monitoring-Section 10.5	Update to reflect new naming convention for DEX indices as a result of change in ownership (FTSE) and new focus on liability-driven asset management	AON's IPS Review and Investment Department	Section X-Monitoring-Section 10.5-Page 3
24	Inclusion of a monitoring cycle and addition of current monitoring practice by Investment Department	Section X-Section 10.6	Reflect pre-existing monitoring practice by Investment Department and recommendation by AON to specify a monitoring cycle	AON's IPS Review and Investment Department practice	Section X-Section 10.6-Page 5
25	Addition of a separate withdrawal policy	Section XI-Withdrawal Policy	Inclusion of a withdrawal policy in accordance with industry best practice	AON's IPS Review and Investment Department	Section XI-Withdrawal Policy-Page 6
26	Inclusion of investment definitions	Appendix A - Definitions	Clarification of investment terminology	Investment Department	

PUB (MPI) 1-49

Volume:	**II**	**Page No.:**	**INV, Attachment B**
Topic:	**Investment Income**		
Sub Topic:	**Asset Liability Management Study**		
Issue:	**AON Recommendations**		

Question:

Please provide a table detailing each of the recommendations made by AON, referencing the page in the AON report, the Corporation's response to the recommendation, and the status of compliance with recommendation.

Rationale for Question:

To understand the extent MPI has adopted recommendations made by AON in the Asset Liability Management Study.

RESPONSE:

Please see the attached table which provides the requested information.

Report	Recommendation	Page #	Status of compliance
AON Phase I	Amend the formulation of the MfAD to reduce or eliminate the impact on duration	20	In the Corporation's 2015/16 forecast, it was assumed that a reduction of 0.25% in the investment margin will occur in the October 2015 Appointed Actuary's report. However, the Appointed Actuary has yet to sign off the reduction on the margin.
	Change the calculation of the portfolio yield used for the valuation to adopt the revised duration weighted average yield methodology	20	Implemented
	Work with the fixed income manager to assess and align its capabilities to implement a tighter hedging strategy in light of the provided list of characteristics and tools required	20	Implemented
	Adopt a tighter hedging strategy and favor a more flexible approach with key rates matching	21	A tighter hedging strategy was implemented but key rate matching was not implemented
	The hedging strategy should hedge the liabilities that include the MfAD as this is the measure that drives the volatility in premiums.	21	Implemented
	The recommended benchmark should be the return on the present value of cash flows over the measument period	44	This recommendation is in the process of being implemented
AON Phase II - Part A	Provide in the policies that surplus distributions be spread over time	14	The methodology to establish the maximum range for the RSR is still under consideration by the PUB. Until this methodology and the maximum amount of the RSR is finalized, no policies for surplus distribution are being considered. Ultimately, the PUB will order surplus distributions based on its findings in that particular rate application.
	Revise RSR targets	14	
	Adoption of portfolio #2	15	The adoption of portfolio #2 is in progress.

Report	Recommendation	Page #	Status of compliance
2014 Asset Liability Study IPS Review and withdrawal policy	Provide a broader perspective of risk	2	Included in new Investment Policy Statement-April 2015
	Inclusion of MUSH bonds in the statement of investment beliefs	2	Addressed in new Investment Policy Statement-April 2015
	Changes in the investment fund strategy statement in regard to fixed income investments as a result of the new direction taken around active management of credit and/or duration	2	Addressed in new Investment Policy Statement-April 2015
	In Conflict of Interest section, gender neutral wording may be more appropriate	3	Addressed in new Investment Policy Statement-April 2015
	Broaden the prohibition on related party transactions	3	Addressed in new Investment Policy Statement-April 2015
	Expansion of the liabilities definition by referencing pension liabilities	3	Addressed in new Investment Policy Statement-April 2015
	Addition of consideration of risk relative to liabilities	3	Addressed in new Investment Policy Statement-April 2015
	Definition of timeframes to which the investment objectives are to be measured	3	Addressed in new Investment Policy Statement-April 2015
	Update references to DEX indices to account for the new re-branded versions under FTSE Group's family indices	3	Addressed in new Investment Policy Statement-April 2015
	Adoption of the new IPD Canadian Property Fund Index as a benchmark for the real estate allocation	4	The Investment Department researched the status of the development of that index during its annual Investment Policy Review in March 2015. As a result of that review, it was determined that the new index was relatively small in comparison to the IPD Canada Index, that real estate pooled fund manager represented a significant portion of the index, and the index had extremely limited historical returns. On that basis the index was deemed unsuitable at the current time.
	Investment in infrastructure pooled funds should be deemed a permitted investment category	4	Addressed in new Investment Policy Statement-April 2015
	Merge sections 6.10 and section 6.11 (Private Equity)	4	Addressed in new Investment Policy Statement-April 2015 Both sections were merged into section 6.10
	Expand use of leverage to include infrastructure investments	4	Addressed in new Investment Policy Statement-April 2015
	Removal of last sentence in section 6.14 in regard to debt obligations that are in default of principal or interest, given rating requirement in section 8.6	4	Not addressed in new Investment Policy Statement-April 2015
	Changes to Section VII-Asset Allocation based on results of the ALM Study	4	Addressed in new Investment Policy Statement-April 2015. Table 7.1 was modified to reflect the new asset allocation.
	Inclusion of a corporate bonds target range within the fixed income portfolio	5	Not addressed in new Investment Policy Statement-April 2015
	Review of acceptable duration range relative to liabilities	5	Addressed in new Investment Policy Statement-April 2015

Report	Recommendation	Page #	Status of compliance
2014 Asset Liability Study IPS Review and withdrawal policy *(cont'd)*	Addition of treatment of currency risk derived from holdings of Canadian issued foreign pay bonds in section 8.5	5	Not addressed in new Investment Policy Statement-April 2015
	Addition of greater clarity to expectations regarding downgrades in new section 8.7	5	Addressed in new Investment Policy Statement-April 2015
	Specification of a monitoring cycle for investment managers	5	Addressed in new Investment Policy Statement-April 2015
	Inclusion of a fund withdrawal policy as an industry best practice	6	The Investment Department reviewed the policy recommended by AON and adapted it to the Corporation's unique characteristics.

PUB (MPI) 1-50

Volume:	II	Page No.:	INV, Attachment B
Topic:	Investments		
Sub Topic:			
Issue:	Asset Liability Management Study		

Question:

a) Please provide copies of any analysis or reports provided by AON that have not been filed in this application. Please file pursuant to Board rule 13 or alternatively file a redacted version of the report.

b) Please indicate as to what approaches are used by Saskatchewan Auto Fund and Insurance Corporation of British Columbia.

Rationale for Question:

To understand the approaches used in other jurisdictions for asset liability management.

RESPONSE:

a) Attached please find the following reports:

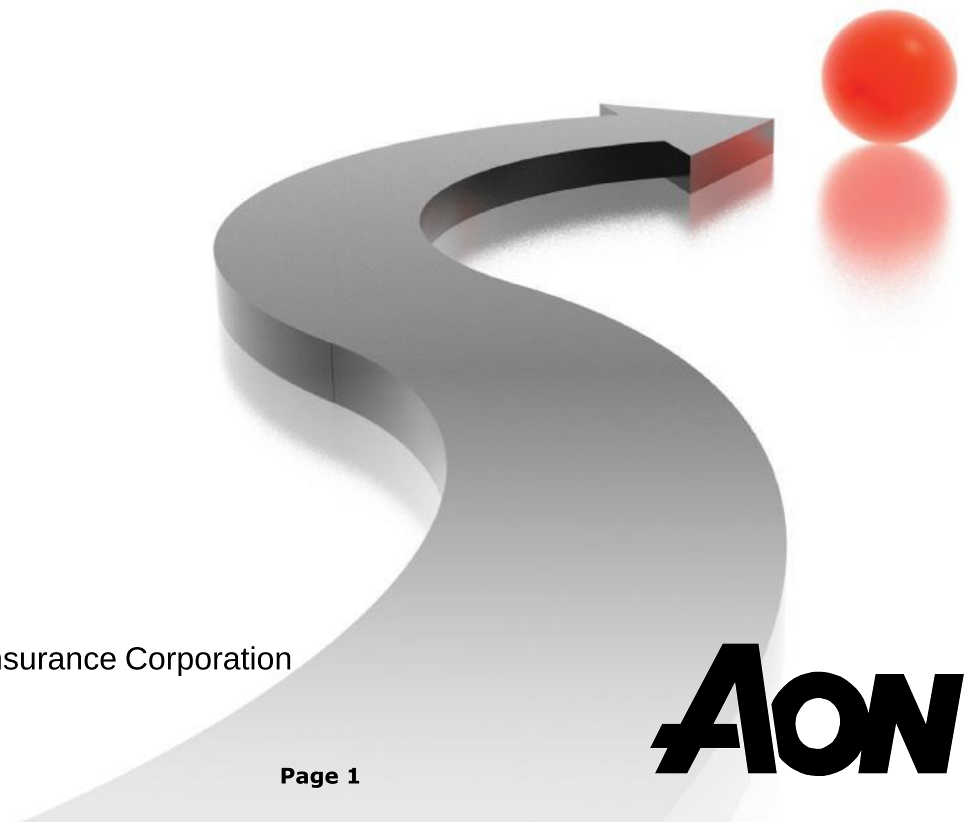
- Attachment A: Marginal Risk Analysis
- Attachment B: Asset Class Descriptions
- Attachment C: Aon ALM Report Phase II – Part B
- Attachment D: Asset Only Optimization #1 – Minimal Constraints
- Attachment E: Asset Only Optimization #2 – Increased Mortgages and Canadian Equities
- Attachment F: Asset Only Optimization Constraints
- Attachment G: MPI IPS Review

b) Aon Hewitt reviewed the Corporation's liabilities and recommended an ALM strategy that is appropriate for MPI's unique situation. The ALM strategies of ICBC and SGI were not reviewed.

Manitoba Public Insurance Corporation

Asset-Liability Study

Marginal Risk Analysis in Asset-only Space



Prepared by Aon Hewitt
September 2014

Presentation to The Manitoba Public Insurance Corporation

Table of Contents

Marginal Risk Analysis

- This marginal risk analysis is intended to assist Manitoba Public Insurance in the selection of asset classes for the optimization as part of the asset-liability study.

- The central point situates the current policy portfolio in a risk / reward framework.
  - Risk: Annual pessimistic average of annual return, measured as the conditional tail expectation at the 5% level. That is, the average of the worst 5% annual results, measured over a 10-year period.
  - Reward: 10-year annualized nominal return.

- Then, a series of portfolios are constructed, allocating 5% to an asset class and 95% to the policy portfolio.
  - The risk / reward statistics are calculated and plotted, thus allowing visualization of the impact of an incremental allocation to an asset class.
  - The ideal position is in the upper left quadrant.

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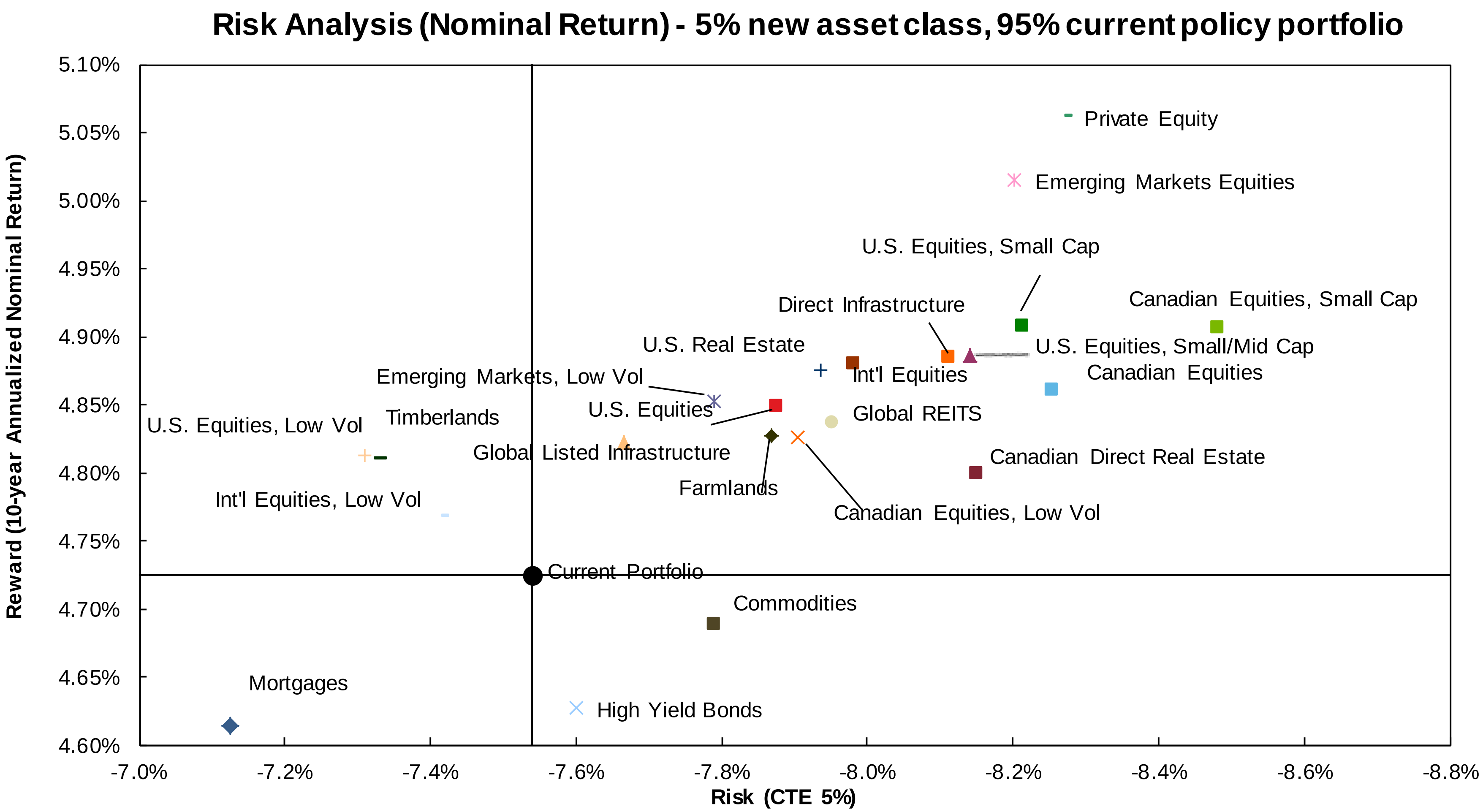
… Marginal Risk Analysis



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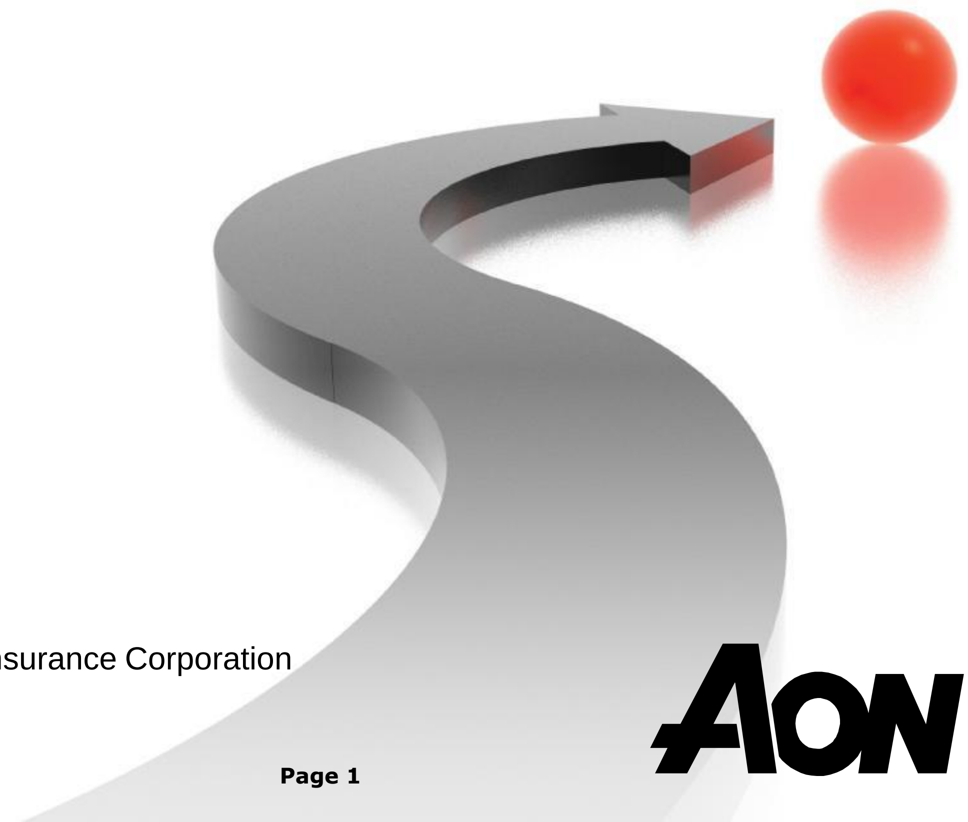
Manitoba Public Insurance Corporation

Asset-Liability Study

Summary Information on Selected Asset Classes



Prepared by Aon Hewitt
September 2014

Presentation to The Manitoba Public Insurance Corporation

Table of Contents

Asset Classes

Mortgages

- Characteristics
  - Description:
    - Debt instrument by which the borrower (mortgagor) gives the lender (mortgagee) a lien on property as security for the repayment of a loan
    - Investor (mortgagee) receives principal plus interest payments, usually monthly
    - Term typically 3 – 7 years
  - Expected return: long term returns expected to exceed bonds and lag equities
  - Liquidity:
    - Pooled funds are somewhat liquid
    - Extreme market conditions can reduce liquidity (the case during the 2008 credit crisis)

- Drawbacks
  - Risk: default risk
  - Fees: Higher fees than bonds

- Role in the portfolio
  - Increase portfolio return if replaces bonds
  - Reduce risk through low volatility and correlation to equities

… Asset Classes

High Yield Bonds

- Characteristics
  - Description:
    - Corporate bonds with credit ratings of less than BBB (below investment grade)
    - In Canada, the most common is the DEX High Yield Bond Index
    - Market opportunity is dominated by bonds from American companies
    - Canadian market lacks size, depth and breadth; U.S. or global approach required
  - Expected return: Long term returns expected to exceed bonds and mortgages and lag equities
- Drawbacks
  - Risk:
    - Higher correlation to equities than universe bonds
    - Default
  - Liquidity: Somewhat illiquid
  - Fees: Higher fees than bonds
- Role in the portfolio
  - Enhance bond return

 |

… Asset Classes

Canadian Equities, Small Capitalization

- Characteristics
  - Composition: the portfolio is comprised of stocks of Canadian companies with a market capitalization below 1.5 B$ (approximately)
  - Expected return: greater than large capitalization given the organic growth potential
  - Market inefficiencies: market that is followed by a smaller number of parties, allowing greater opportunities for added value through active management
- Drawbacks
  - Risk: greater volatility than large capitalization equities
  - Magnitude of losses: very high in times of crisis
  - Diversification: little benefit due to strong correlation with large capitalization equities
- Role in the portfolio
  - Increase of the expected return

… Asset Classes

Emerging Markets Equities

- Characteristics
  - Diversification: emerging markets equities allow an exposure to various geographical regions and to companies based outside of developed countries. The access to 21 countries and over 2,600 companies results in a smaller correlation with the larger stock market indices
  - Economy: emerging market economies have much less debt and offer more growth potential as well as greater returns
  - Demographics: emerging markets are undergoing major developments and have strong population growth. In the coming years, the middle class will grow further and this will stimulate internal growth of the economies

- Drawbacks
  - Higher transaction costs
  - Political risks
  - Currency risk difficult to hedge
  - Higher volatility
  - Lower liquidity

… Asset Classes

Emerging Markets Equities

- Role in the portfolio
  - Exposure to emerging markets is beneficial to the overall portfolio by increasing expected returns, thus allowing the inclusion of asset classes with greater risk reduction potential but lower expected returns

10 Largest Emerging Markets Equities Companies [1]

Company	Benchmark Weight (%)	Country	Sector	Approximate Market Capitalization
Samsung Electronics Co Ltd	3,55	South Korea	Technology	126 B$
Taiwan Semiconductor Manufacturing	2,38	Taiwan	Technology	84 B$
China Mobile Ltd.	1,81	Hong Kong	Telecommunications	64 B$
China Construction Bank Corp H Shares	1,52	Hong Kong	Financial services	54 B$
Industrial And Commercial Bank Of China Ltd. H Shares	1,37	Hong Kong	Financial services	49 B$
Tencent Holdings Ltd.	1,31	Hong Kong	Technology	46 B$
Gazprom OAO	1,30	Russia	Energy	46 B$
America Movil, S.A.B. de C.V.	1,14	Mexico	Telecommunications	40 B$
Naspers Ltd	0,93	South Africa	Discretionary spending	33 B$
CNOOC, Ltd.	0,91	Hong Kong	Energy	32 B$
Weight of 10 largest emerging markets companies	16,22	n/a	n/a	n/a

- For comparison purposes, the 10 largest companies in the S&P/TSX have a combined weight of 34.4 %[2] and the largest company, RBC, has a market capitalization of 92 B$. The10th company, Manulife Financial Corporation, has a market capitalization of 33 B$

[1] Source: MSCI – July 31 2013. Values are in USD

[2] Source: Morningstar – July 31 2013

… Asset Classes

Direct Real Estate

- Different investment structures are available to investors, depending on the desired levels of liquidity, risk and complexity (closed-ended funds, open-ended funds and direct real estate)

- Characteristics
  - Strategy: different strategies are available to investors (core, value-added and opportunistic). Each strategy offers a different risk-reward profile (see Appendix)
  - Diversification: immediate and greater than most other asset classes
  - Accessibility: ease of access to historical performance and simple fee structure
  - Management team: no experience required on the investor's end. Investment decisions taken by a team of professional managers
  - Correlation: strongly correlated with inflation

- Drawbacks
  - Liquidity: delays to exit. To overcome this situation, certain fund managers maintain higher levels of liquidity, although this creates a drag on performance
  - Evaluation: the fund valuation is an approximation (although there are certain advantages from a smoothed asset valuation)

- Role in the portfolio
  - Risk reduction as a result of low correlation and reduced volatility
  - Inflation protection

 |

… Asset Classes

Listed Global Real Estate (REITs)

- Characteristics
  - Composition: portfolio comprised of stocks of companies operating in the real estate sector
  - Accessible: publicly exchanged asset class that is liquid and transparent
  - Diversification: simplified access to sector and global diversification
  - Cost: less than Direct Real Estate

- Drawbacks
  - Volatility: greater than Direct Real Estate
  - Correlation: greater correlation with equities and smaller correlation with inflation
  - Contagion: downside risk resembling equities in times of crisis

- Role in the portfolio
  - Risk reduction due to reduced correlation with equities

… Asset Classes

Direct Infrastructure

- Characteristics
  - Composition: portfolio of projects offering essential services, oftentimes in monopoly and regulated environments
  - Yield: stable and predictable cash flows, often linked to inflation
  - Profile: requires a long-term strategic commitment on behalf of the investor
  - Expected return: high
  - Sector that is less cyclical than the economy and less exposure to market downturns
- Drawbacks
  - Liquidity: weak
  - Various risks: political and regulatory, environmental and social, operational, currency, refinancing and potential conflicts of interest
  - Investment: there can be a delay before the investment actually occurs and therefore no return is generated throughout the early steps of the investment process
  - Fees: high
- Role in the portfolio
  - Risk reduction as a result of low correlation and reduced volatility
  - Inflation protection

 |

… Asset Classes

Listed Infrastructure

- Characteristics
  - Composition: portfolio comprised of stocks in companies operating in essential services industries, often in monopoly environments or with high barriers to entry (regulation, major capital requirements, etc.)
  - Non-cyclical: sector that is less cyclical, providing protection in periods of economic slowdown
  - Liquidity: high, considering that these investments are publicly traded
  - Yield: higher yield than stock market average, relatively stable and predictable, often linked to inflation, depending on the economic situation of the company
  - Expected return: relatively high, provided by dividend yield and capital appreciation
- Drawbacks
  - Various risks: political and regulatory, environmental and social, operational, currency, refinancing and potential conflicts of interest
  - Diversification: less than Direct Infrastructure because of exposure to market volatility
  - Fees: medium, but less than Direct Infrastructure
- Role in the portfolio
  - Risk reduction due to reduced correlation with equities

… Asset Classes

Commodities

- Characteristics
  - Inflation protection: prices of commodities are strongly linked to inflation. An inflationary environment should result in a significant increase in commodity prices
  - Diversification: imperfect correlation with stock markets
  - Source of alpha: a good fund manager can generate additional profits from price discrepancies and from the curve of the futures prices
  - Economic conditions: emerging market economies are undergoing substantial growth and commodity products are in strong demand; this should put upward pressure on prices for future years
- Drawbacks
  - Cost: rolling over the contracts can be costly
  - Fees: higher transaction costs
  - Contagion: downside risk resembling equities in times of crisis (-24.3 % in 2008)
- Role in the portfolio
  - Risk reduction due to weak correlation

… Asset Classes

Global Macro Hedge Funds

- Characteristics
  - Portfolio: generally concentrated in long/short positions in major asset classes (bonds, equities, currencies and commodities). Positions and strategies, however, are different, and result in a reduced correlation with the overall portfolio
  - Approach: top-down with a high-level overview of the overall economy, with positions taken accordingly
  - Transactions: fund manager can make frequent transactions in a timely manner in order to take advantage of market timing and changes in economic situations; positions are therefore liquid
  - Expected return: relatively high
  - Diversification: performance is unrelated to the direction of equity markets, but rather to the performance of the overall positions taken by the fund manager

- Drawbacks
  - Risk: high. Selecting the appropriate fund manager is of critical importance
  - Disclosure: increasing, but remains relatively weak
  - Fees: high, base fees with additional fees for over-performance

- Role in the portfolio
  - Risk reduction as a result of low correlation and reduced volatility

… Asset Classes

Managed Futures Hedge Funds

- Characteristics
  - Portfolio: similar to Global Macro strategies. Comprised of long/short positions in major asset classes (bonds, equities, currencies and commodities). However, portfolio is generally more diversified than for Global Macro strategies
  - Approach: decisions made using quantitative models seeking to exploit market trends
  - Expected return: medium. Generally positive in markets with an upward or downward trend. Furthermore, in a market downturn, positive returns are an important asset in mitigating losses Risk-reward: the risk-reward profile is not as attractive when considered in isolation, but becomes interesting when combined with the overall portfolio. This strategy provides the greatest diversification benefits from amongst all other hedge fund strategies

- Drawbacks
  - Risk: medium
  - Performance: underperformance in non-trending markets

- Role in the portfolio
  - Risk reduction due to weak correlation and positive expected return in crisis periods (+18.3 % in 2008)

… Asset Classes

Market-neutral Hedge Funds

- Characteristics
  - Portfolio: comprised of long positions in attractive stocks and short positions in less attractive stocks, with nominal value of investments being more or less equal
  - Approach: strategy seeking to eliminate systemic risk by adopting beta-neutral positions. Alpha is generated by identifying market inefficiencies or using in-depth knowledge of the manager in a particular industry
  - Transactions: fund manager can make frequent transactions in a timely manner in order to take advantage of market timing and changes in economic situations; positions are therefore liquid
  - Expected return: medium

- Drawbacks
  - Risk: medium
  - Disclosure: increasing, but remains relatively weak
  - Correlation: historically higher correlation with equities than other hedge fund strategies, which reduces potential risk reduction via diversification

- Role in the portfolio
  - Generate return regardless of market performance

… Asset Classes

Private Equities

- Characteristics
  - Risk-reward: attractive risk-reward profile. Weaker correlation with equities allows reduction in portfolio volatility
  - Portfolio: privately-held companies
  - Profile: requires a long-term strategic commitment on behalf of the investor
  - Value-added: fund managers seek to generate added value by acquiring majority or minority stakes in companies in order to develop them and eventually sell those stakes with profit
  - Transactions: fund managers invest in privately-held companies with no public exchange market such as the ones used for publicly-held companies
- Drawbacks
  - Liquidity: weak
  - Risks: geographic, concentration, sector, industry and competence of management team
  - " J-Curve " return structure
- Role in the portfolio
  - Increase portfolio return

… Asset Classes

Farmland

- Characteristics
  - Portfolio: typically actively managed portfolio of row-crop farmland, pasture land or permanent crops. Portfolios tend to be geographically focused, with the vast majority of agricultural private assets concentrated in North America, Australia, Brazil and Eastern Europe
  - Approach: Permanent crops tend to be higher risk/return as the value of the crops is material to the overall value of the asset, while farmland tends to be lower risk/return as the value is typically limited to the land, soil quality and related infrastructure
  - Yield: Stable for farmland. The returns are typically linked to inflation
  - Profile: requires a long-term strategic commitment on behalf of the investor
  - Expected return: medium-high
  - Sector that is less cyclical than the economy and less exposure to market downturns
- Drawbacks
  - Liquidity: weak
  - Various risks: weather, political (subsidy), difficult to diversify globally
  - Fees: high
- Role in the portfolio
  - Risk reduction as a result of low correlation and reduced volatility
  - Inflation protection

… Asset Classes

Timberland

- Characteristics
  - Portfolio: typically actively managed portfolio of timberland. The value/returns are driven by the value of the trees (lumber), cuttings (pulp) and value of the land. The returns are also driven by the rate of biologic tree growth, type of trees grown and demand for lumber by the construction industry. Portfolios tend to be geographically focused, with the vast majority of timberland private assets concentrated in North America, Brazil and South Asia
  - Yield: The asset class provides yield for investors
  - Profile: requires a long-term strategic commitment on behalf of the investor
  - Expected return: medium-high
- Drawbacks
  - Liquidity: weak
  - Various risks: housing construction and demand from China
  - Fees: high
- Role in the portfolio
  - Risk reduction as a result of low correlation and reduced volatility
  - Inflation protection

Appendix: Direct Real Estate

- **Strategies : trade-off between return and risk**
  - Real estate investments can be regrouped in three large categories with distinctive risk-reward profiles:
    - **" Core " Real Estate**
      - Conservative strategy with low investment risk
      - Generally large, well-maintained office buildings with 100 % occupation
      - Theoretically protects against inflation, and the primary objectives are stable cash flows and capital preservation
      - Holding period is typically 8 to 12 years
    - **" Value-added " Real Estate**
      - Medium investment risk
      - These types of properties generally require renovations or repositioning (ex: replacement of management team or tenants)
      - Extra emphasis on capital gains as opposed to generating stable cash flows
      - Holding period is typically 3 to 6 years

… Appendix: Direct Real Estate

- **… Strategies : trade-off between return and risk**
  - **" Opportunistic " Real Estate**
    - High investment risk, resulting also in a higher expected return
    - These investments may require converting properties, as well as redeveloping or repositioning them
    - Holding period is usually 3 to 6 years

… Appendix: Direct Real Estate

- **Investment structure: trade-off between return and liquidity**
  - The different investment structures can be regrouped within the following three categories:
    - **Closed-ended funds**
    - **Open-ended funds**
    - **Direct investments**

… Appendix: Direct Real Estate

- **Investment structure: trade-off between return and liquidity**

Investment structure	Advantages	Disadvantages
Closed-ended fund	• Funds are almost entirely invested in real estate (little cash) • Appropriate for " passive " investors; no investor expertise required • Management fees based on performance allow for alignment of interests • Expected return generally higher	• No liquidity (investment is generally locked-up for many years) Less diversified than open-ended funds, especially during the investment phase • More appropriate for " Value-added " or " Opportunistic " investment strategies • Properties are known only after investment decision made
Open-ended fund	• Immediate diversification and greater than other investment structures • Properties are known prior to investment decision being made • Fund performance history exists • Funds can be rebalanced • Relatively simple management fee structure • Appropriate for " passive " investors; no investor expertise required	• Cash held for redemptions negatively impacts performance • Fund valuation is on a best-estimate basis
Direct investments	• Flexibility and control on the investor's investment strategy • Management fee structure can be personalized	• Requires internal expertise • Requires time and dedicated resources • Minimal liquidity

Manitoba Public Insurance Corporation Asset Liability Study

Phase II – Part B – Implementation Discussion

Prepared by Aon Hewitt

Presentation to Manitoba Public Insurance

Empower Results®

Agenda

Executive Summary

Section 2.05 (i) – Asset Class Ranges

- Observations on asset class ranges
  - Past research suggests asymmetrical asset class limits provide the best risk adjusted return outcomes
  - Greater maximum ranges and tighter minimum ranges are optimal, let strong asset classes grow longer
  - Narrow ranges can result in more frequent rebalancing and increased costs
  - Illiquid asset classes require wide ranges
  - Fixed income allocation's primary objective is to match liabilities
- Recommended asset class ranges are provided on page 11

Section 2.05 (j) – Fixed Income Allocation

- Observations on Tactical Fixed Income Opportunities in Corporate Bonds
  - Strategic overweight/underweight to Corporates difficult to support
  - Tactical overweight/underweight to Corporates can be attractive; market may provide opportunities for significant value added
  - Long Term Corporates offer a consistent yield advantage
  - Lower credit quality Corporates offer greater opportunity for value added

…Executive Summary

… Section 2.05 (j) – Fixed Income Allocation

- Observations on Tactical Fixed Income Opportunities in Corporate Bonds
  - Provincials have greater volatility (a result of greater duration), yet greater degree of downside protection
  - Current yield spreads are not attractive from a historical perspective
  - Forward looking assumptions suggest Corporates may offer opportunity for enhanced returns
- Recommendation - Adopt acceptable ranges of Corporate bonds within the Fund's Asset Allocation targets
  - Section VII of the IPS targets marketable universe bonds at 29% and marketable long bonds at 10%
  - IPS does not include minimums and maximums for Corporate bond exposure
  - Setting a range would be an effective tool of increasing the Corporate bond exposure and facilitating future tactical exposures

…Executive Summary

… Section 2.05 (j) – Fixed Income Allocation

- Recommendation - Provide Treasury with strategic and tactical guidance
  - Communicate views,(i.e. greater Corporate bond exposure may increase long term returns, help achieve long term objectives)
  - Communicate interest in exposures to lower quality credit, respecting the minimum credit rating of A Low as defined in the IPS, and longer term Corporates, as segments offer the greatest yield advantages and potential for value added over Provincial bonds
  - Indicate expectation that Treasury employ tactical under- and over-weights to take advantage of favorable market conditions

…Executive Summary

Section 2.05 (k) – Style Investing and Alternative Indexing

- Cass Business School/Aon Hewitt Researched Alternative Indices
  - Alternative indices have delivered superior risk-adjusted returns over long time periods relative to market capitalization weighted indices
- Alternative index strategies should be employed where active management is not favoured
- The U.S. equity passive market cap weighted investment strategies (Russell 1000 Value and Russell 2000 Value) are an inefficient way to capture the value and size risk premia
- The Canadian equity passive market cap weighted investment strategy is an inefficient way to obtain market exposure
  - May not be necessary if Canadian equities are reduced as recommended in the AL study
- Canadian equity exposure to value and small cap active mandates are appropriate and supportable

…Executive Summary

… Section 2.05 (k) – Style Investing and Alternative Indexing

- Recommendations
  - Discontinue Canadian equity passive mandate, allocate funds from liquidated mandate in conjunction with the implementation of the new asset mix target weights
  - Determine objectives for the U.S. equity allocation
    - Determine suitable investment approach – passive, alternative index, active (page 48)
    - Determine preferences for style/factor exposures. i.e. low volatility, small cap, value
    - Research and select appropriate index, strategy and manager

…Executive Summary

Section 2.05 (l) – Withdrawal Policies

- Withdrawal Policies required to reflect characteristics, incorporating the following principles
  - Policy Target weights are the key driver of long term performance
  - Largest overweights from policy target weights primary source for withdrawals
  - Illiquid assets generally excluded from withdrawals
  - Follow set parameters for normal course withdrawals
  - Management judgment required for large or irregular withdrawals (i.e., when RSR level is above upper target)
  - Management requires flexibility to address unique circumstance that may rise
  - Withdrawals of corporate funds, without affecting pension plan assets, are permissible to fund corporate operations

Section 2.05 (m) – Investment Policy Statement Review

- Investment Policy Statement Review will be completed as a follow-up to Phase II

Asset Class Ranges

- Section 2.05 – Item (i)

Asset Class Ranges

Section 2.05 (i) - What are the recommended minimum and maximum ranges for each recommended asset class?

- In Part A of the Asset-Liability Study, Aon Hewitt recommended Portfolio #2, which provided a set of target weights for each asset class
- Minimum and maximum ranges are required
  - To ensure asset mix remains near long term strategic target weights
  - To guide MPI's asset mix monitoring and rebalancing activities
- In developing ranges for the recommended asset mix, Aon Hewitt considered several factors;
  - Past research suggests asymmetrical asset class limits provide the best risk adjusted return outcomes
  - Greater maximum ranges and tighter minimum ranges are optimal, let strong asset classes grow longer
  - Narrow ranges can result in more frequent rebalancing and increased costs
  - Illiquid asset classes require wide ranges
  - Fixed income allocation's primary objective is to match liabilities
- In Section VII of the IPS, most asset class ranges are generally narrow, with the exception of marketable universe bonds, the largest asset class by weight

…Asset Class Ranges

- *Recommended* asset class ranges

Asset Class (Group)	Minimum	Normal	Maximum
Cash and Short Term	0%	0%*	5%
Hedging Strategy - Duration Matching	60%	70%	80%
Canadian Equities** (85% Large Cap and 15% Small Cap)	7%	10%	15%
U.S. Equities** (80% Large Cap and 20% Small Cap)	3%	5%	10%
Canadian Direct Real Estate	7%	10%	15%
Direct Infrastructure	2%	5%	10%
Total			

** The recommended asset mix from the AL modeling is 0%. MPI 's current target cash weight is 1%, recognizing an operational need for a small amount of accessible cash.*
*** Allocation between large cap and small cap equities should be addressed through implementation. For example, all-cap strategies, a targeted split between large and small cap based on market capitalization or a target that structurally biases large or small cap equities could be considered.*

Fixed Income Allocation

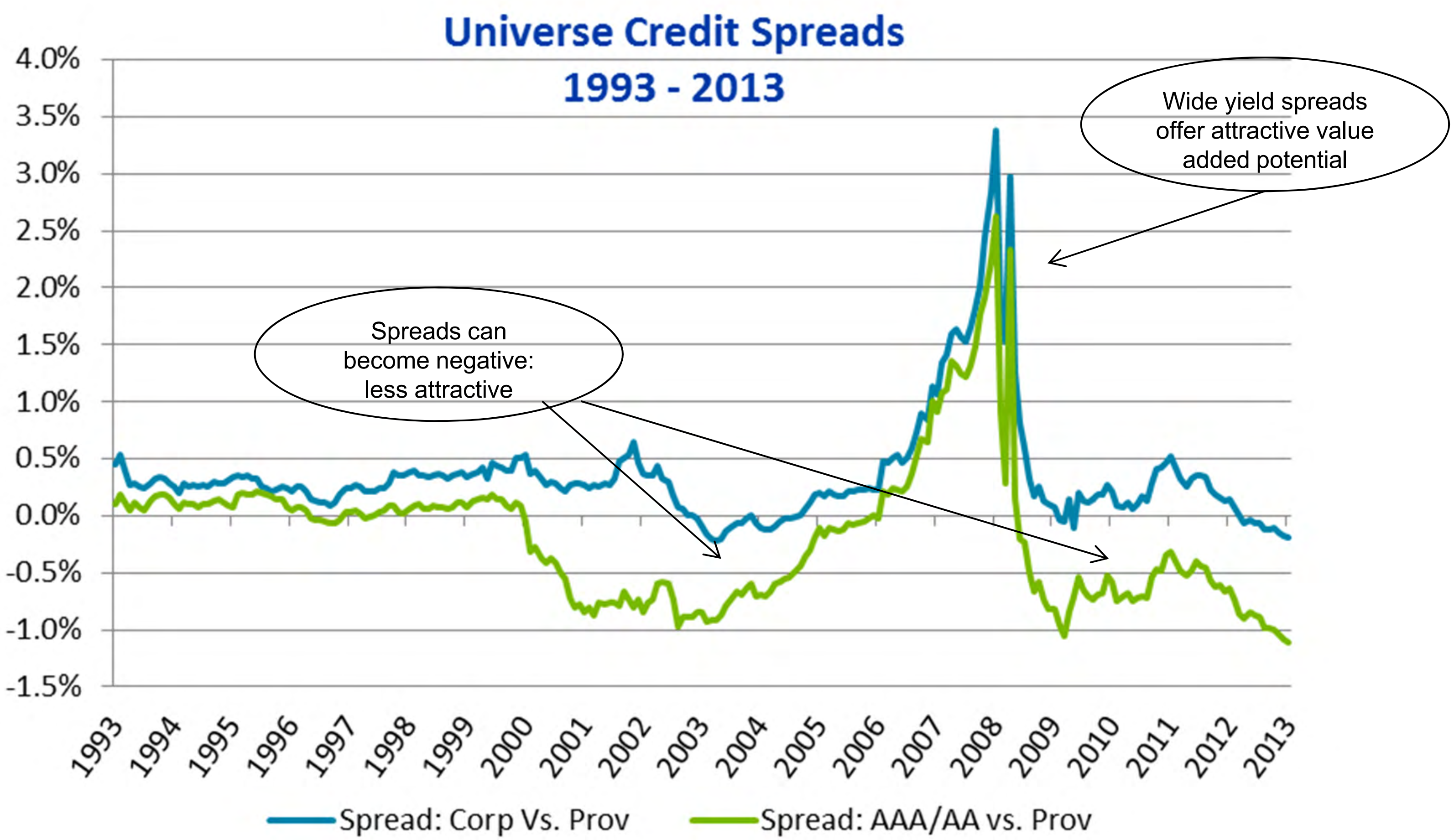
- Section 2.05 – Item (j)

Fixed Income Allocation

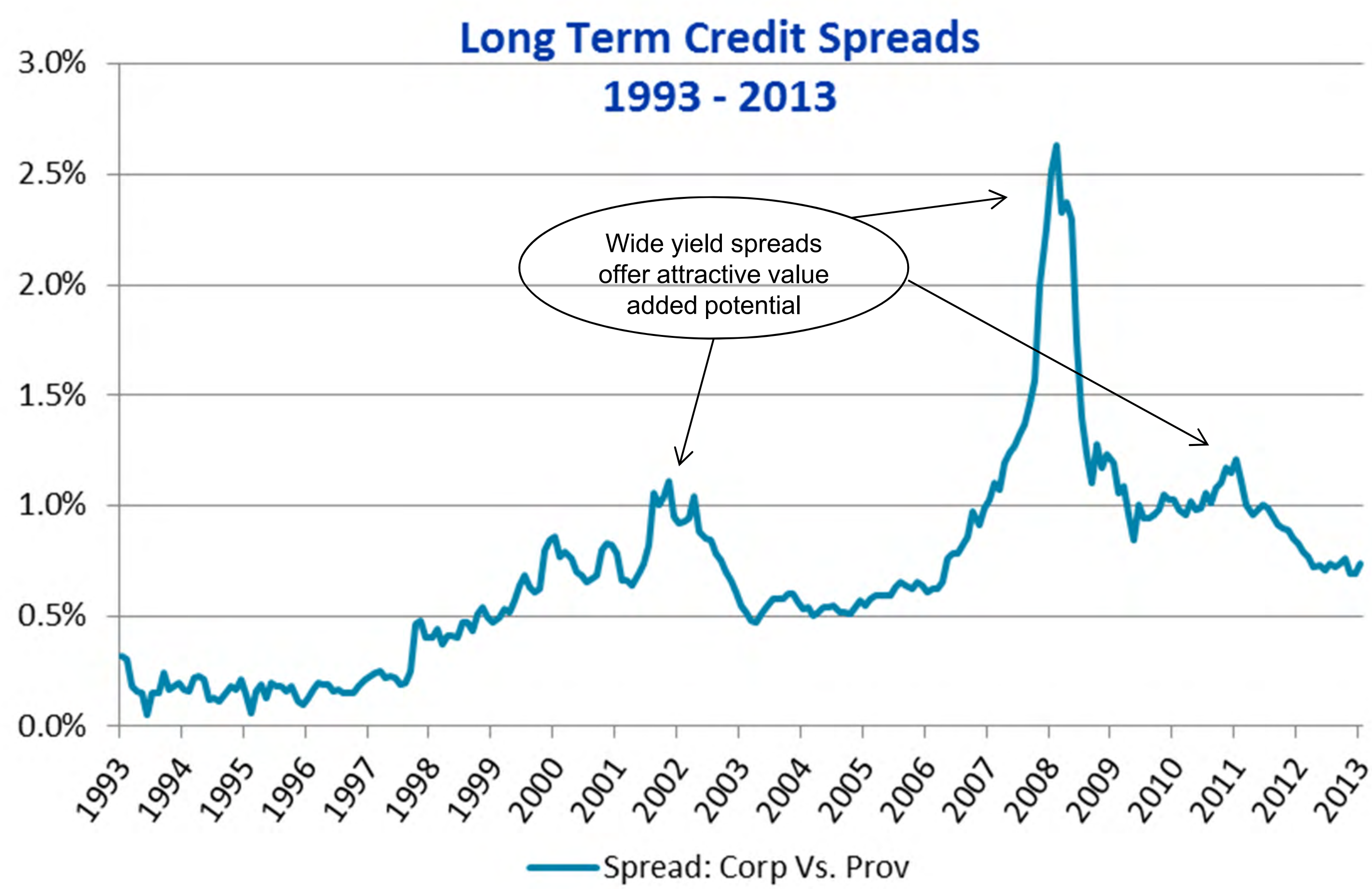
Section 2.05 (j) - What are the potential risks and rewards of tactically underweighting Corporate bonds relative to the FTSE/TMX Universe and peers?

- MPI Fixed Income Targets for Marketable Bonds – 75% Universe Bonds/25% Long Term Bonds (IPS Section 5.5)
- MPI – Large underweight to Corporate Bonds (by approx. 24%)
  - FTSE/TMX Universe Bond allocation to Corporates/Provincials = 29.73%/30.91%
  - FTSE/TMX Long Term Allocation to Corporates/Provincials = 23.46%/48.40%
  - MPI marketable bonds estimate allocation to Corporates/Provincials = 4%/70% (Oct 31, 2014)
- Select Peer Comparison
  - ICBC – Corporates/Provincials = 37.7%/11.2% - Overweight Corporates and underweight Provincials
  - SGI – Corporates/Provincials = 37.2%/37.4% - Overweight Corporates and Provincials (underweight Federals)

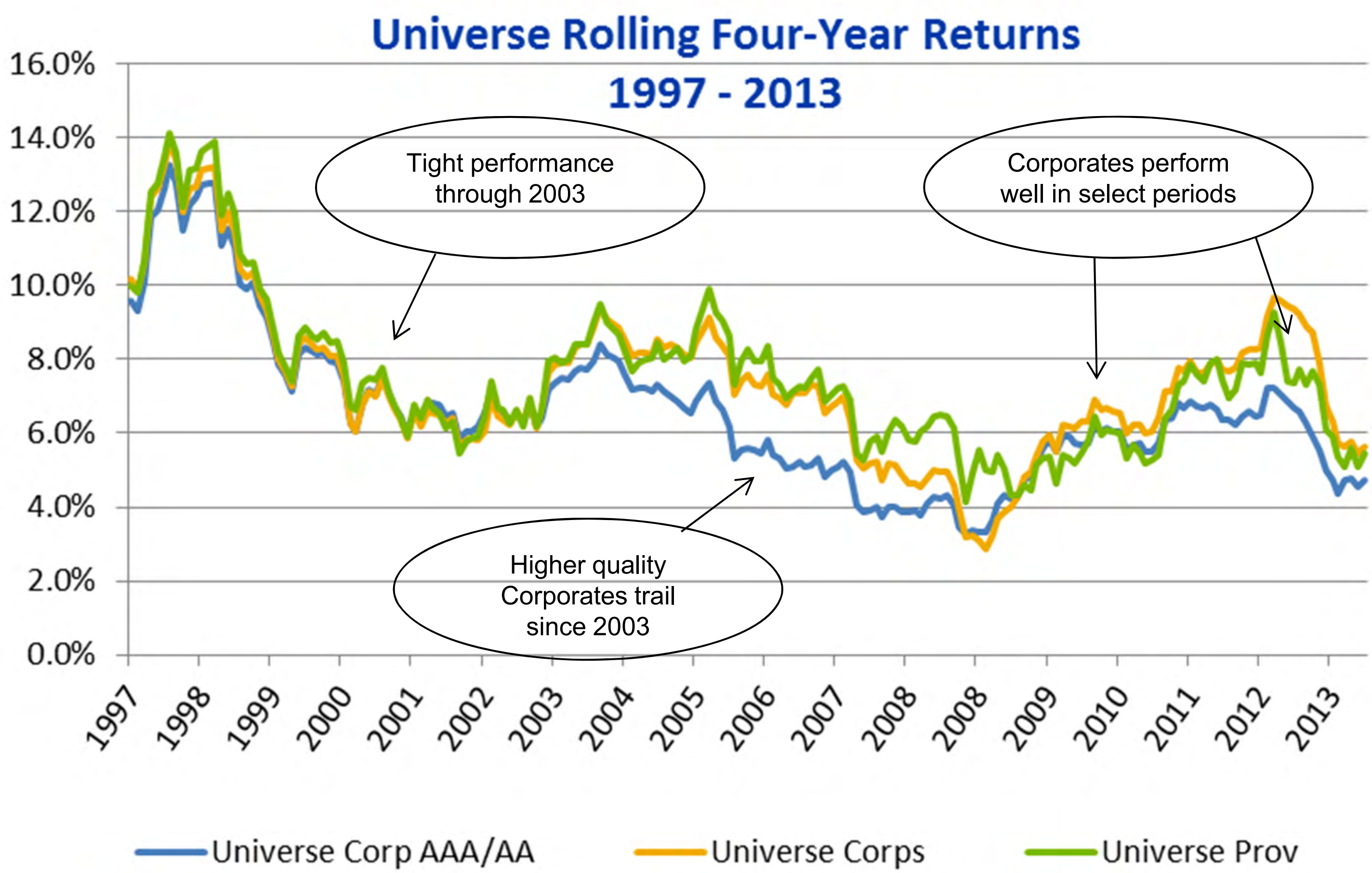
…Fixed Income Allocation
Yield Spreads



…Fixed Income Allocation
…Yield Spreads

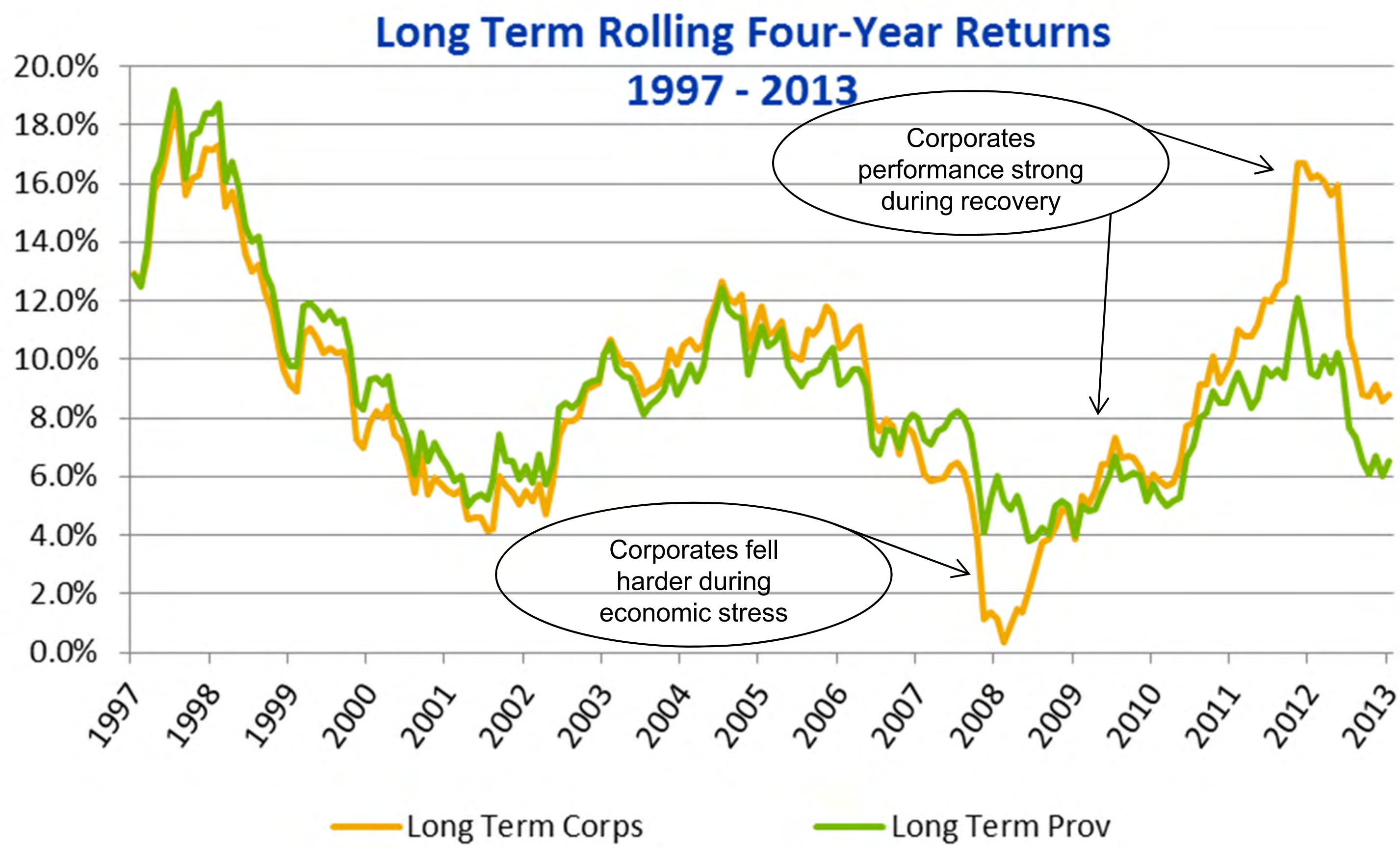


…Fixed Income Allocation
Returns

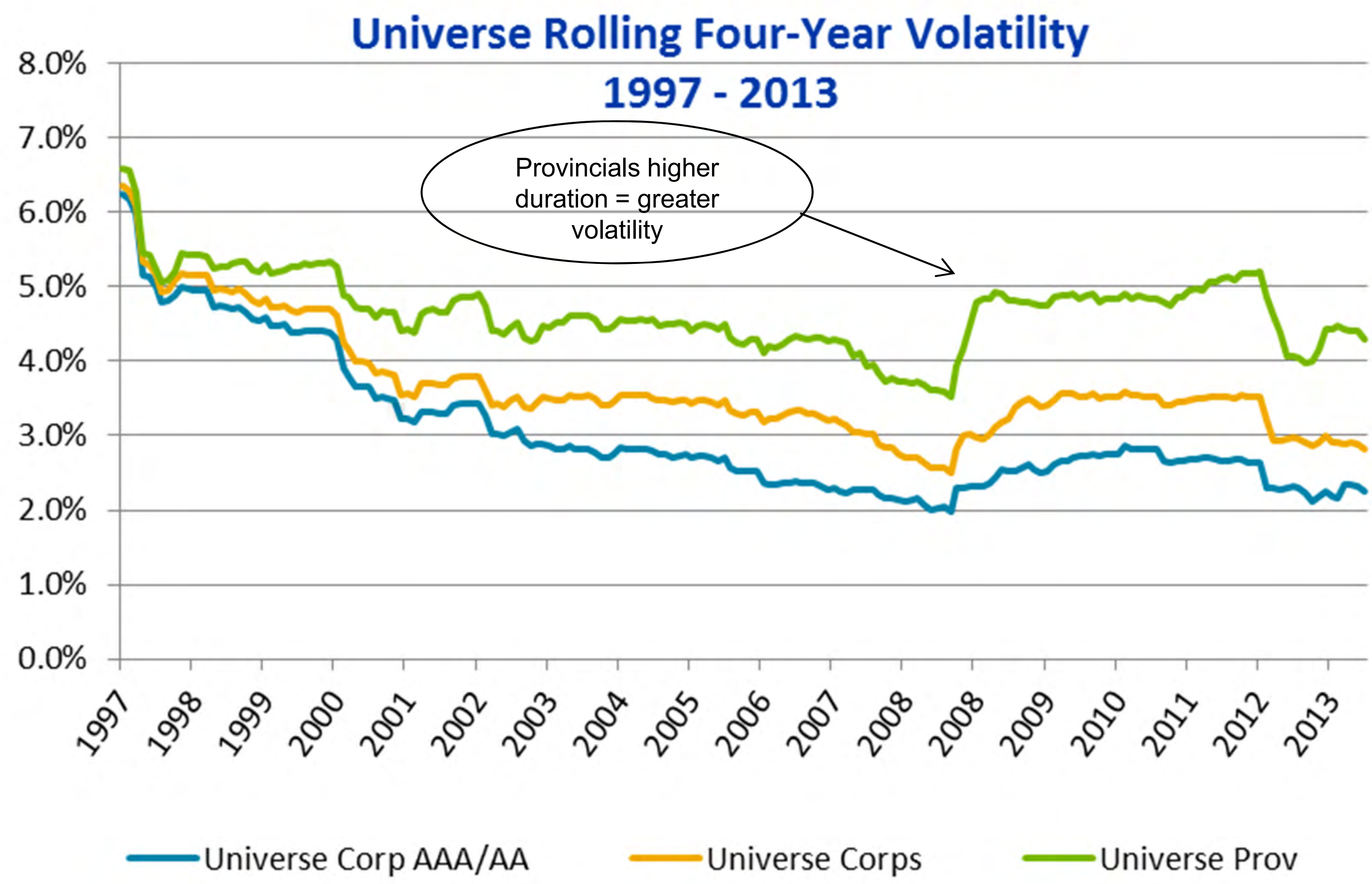


…Fixed Income Allocation

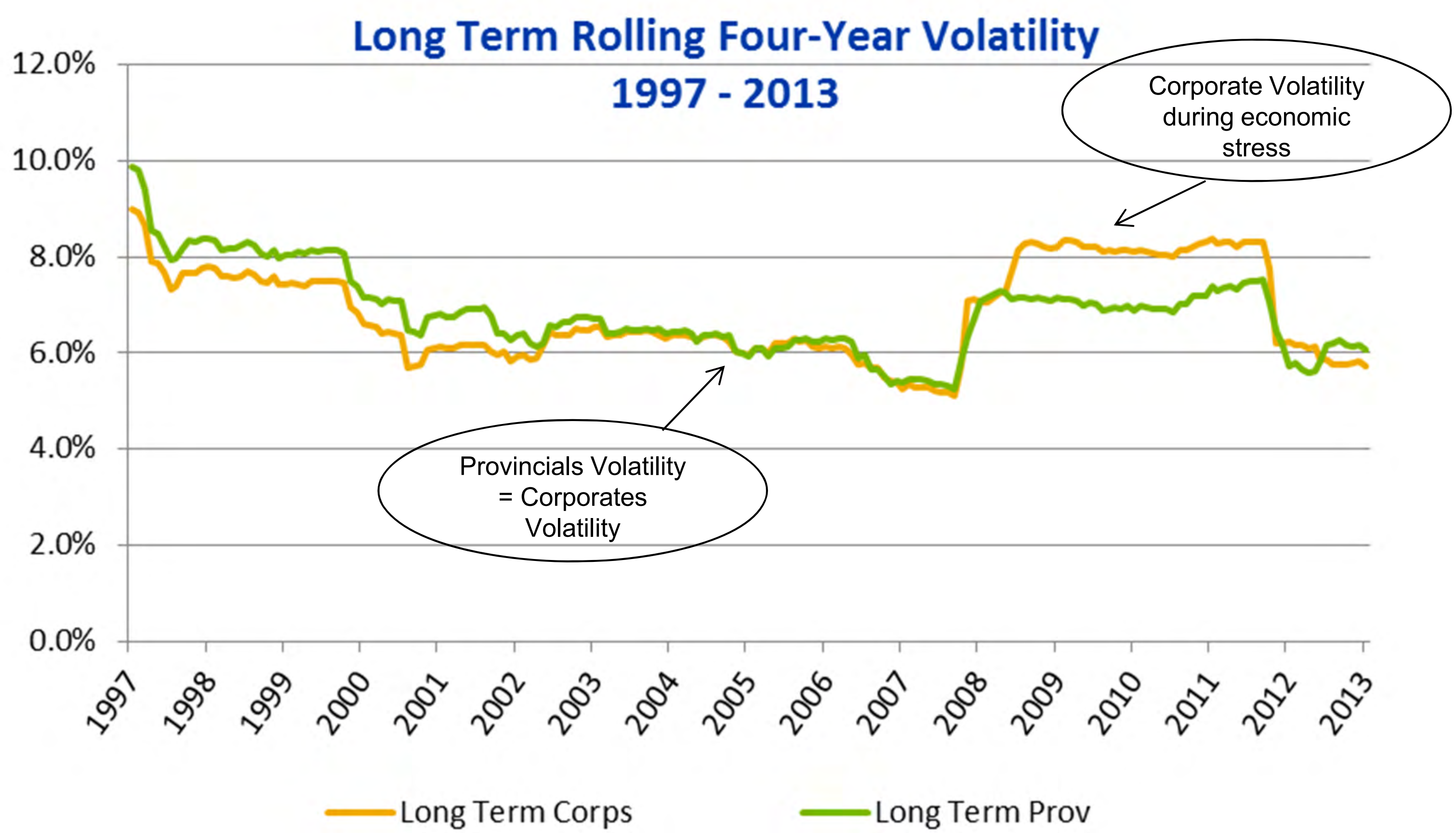
…Returns



…Fixed Income Allocation
Volatility



…Fixed Income Allocation
… Volatility



…Fixed Income Allocation
Key Results

- Analysis and Interpretation of historical yields, returns and volatility impacted by the unique duration foot print of each market segment
  - Corporate bond durations are generally lower than other segments
  - Corporate AAA/AA durations have declined notably since 1998
  - Long Term Corporates AAA/AA were excluded from the analysis due to their small allocation in the FTSE/TMX bond indices

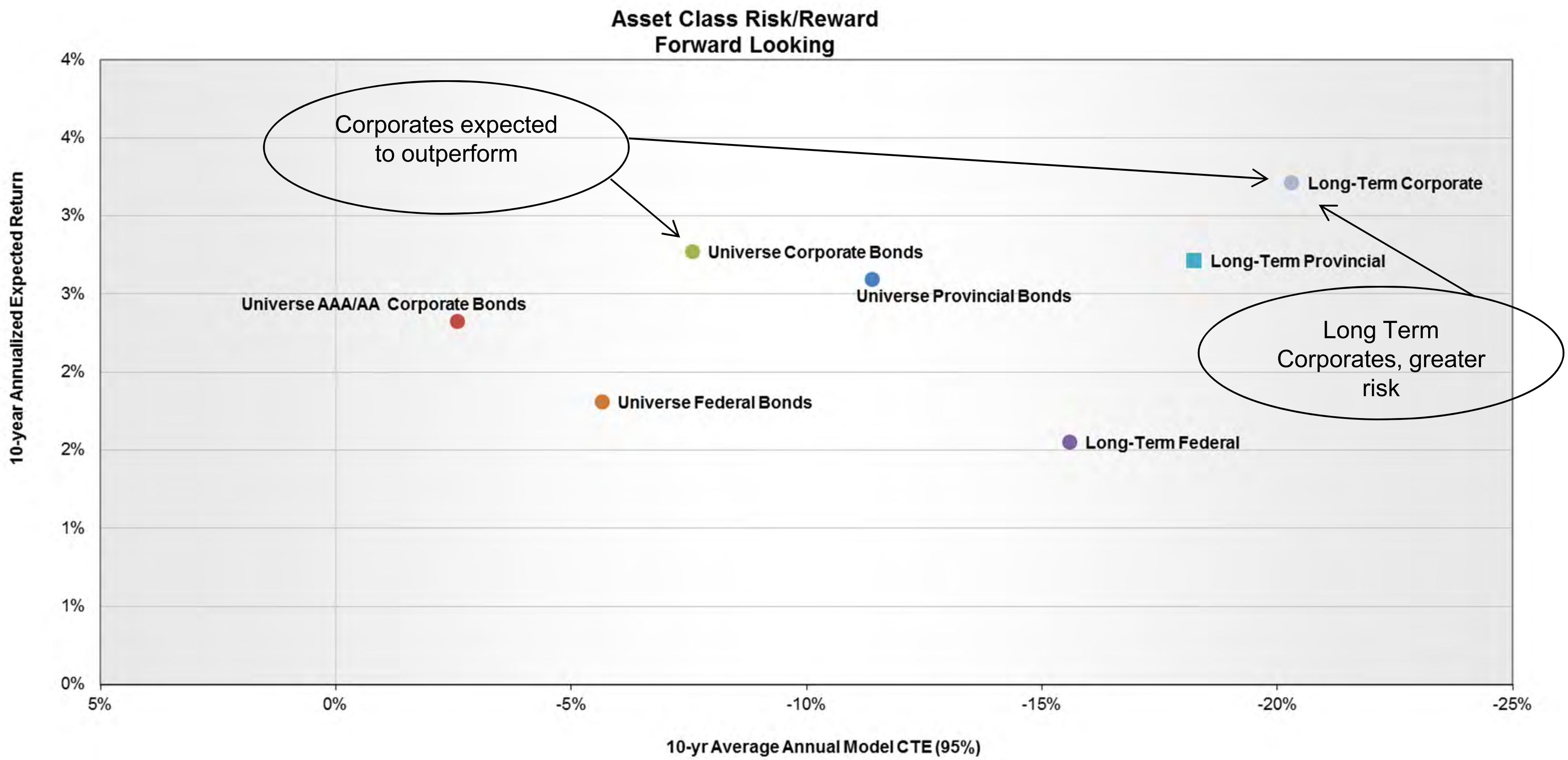
Yield Spread Analysis

	Current (Sep 30)	Average	Min	Max	Upside Vol	Downside Vol
Universe – Corporates vs. Provincials	0.03%	0.35%	-0.22%	3.38%	2.36%	0.52%
Universe – Corp AAA/AA vs. Provincials	-0.81%	-0.18%	-1.11%	2.63%	1.78%	0.69%
Long Term – Corporates Vs. Provincials	0.70%	0.69%	0.05%	2.63%	1.38%	0.70%

Risk and Return Analysis (Rolling four-years)

	Average Return	Min Return	Max Return	Average Volatility
Universe Provincials	7.51%	4.15%	14.10%	4.67%
Universe Corporates	7.40%	2.87%	13.31%	3.65%
Universe Corporates AAA/AA	6.64%	3.30%	13.26%	3.05%
Long Term Provincials	8.96%	3.82%	19.18%	6.85%
Long Term Corporates	9.09%	0.34%	18.47%	6.85%

…Fixed Income Allocation
Forward Looking



…Fixed Income Allocation
…Forward Looking

Aon Hewitt 10-year Forward-Looking Assumptions	Compound Return	Volatility	CTE - Worst Case Scenario
Universe Federal Bonds	1.8%	4.5%	-5.6%
Universe Provincial Bonds	2.6%	5.2%	-11.4%
Universe AAA/AA Corporate Bonds	2.3%	4.9%	-2.6%
Universe Corporate Bonds	2.8%	5.6%	-7.6%
Long Term Federal Bonds	1.5%	8.6%	-15.6%
Long Term Provincial Bonds	2.7%	11.1%	-18.2%
Long Term Corporate Bonds	3.2%	12.8%	-20.3%

- AH Forward Looking Assumptions
  - Corporate bonds expected to outperform Provincials and Federal bonds
  - Universe Corporates lower downside risk than Provincials
  - Long Term Corporates higher downside risk than Provincials

Key Observations

- Yield Spreads
  - Current yield spreads are at or below historical averages
  - Average yield spread of Universe Corporates over Provincials is low
  - Average yield spread of Universe high quality Corporates (AAA/AA) over Provincials is negative
  - Average yield spread of Long Term Corporates over Provincials is attractive
  - Universe yield spreads can widen considerably in times of economic stress
  - Yield spread volatility is on the upside; a source of risk and opportunity
- Returns (Rolling four-years)
  - Average Universe Provincials returns are greater than Corporates and AAA/AA Corporates
  - Range of returns are similar (3 -13%) for Universe Provincials, Corporates and AAA/AA Corporates
  - Average Long Term Provincials returns are similar to Corporates
  - Min range of returns for Universe Provincials is higher than Corporates and AAA/AA Corporates
  - Min range of returns for Long Term Provincials is higher than Corporates

…Key Observations

- Volatility (Rolling four-years)
  - Volatility of Universe Provincials greater than Corporates and AAA/AA Corporates
  - Volatility of Long Term Provincials is equal to Corporates

Note: Provincials duration is slightly higher in Long Term, and nearly three times higher in FTSE/TMX Universe relative to Corporates and Corporates AAA/AA

Observations

- Observations
  - Strategic overweight/underweight to Corporates difficult to support
  - Tactical overweight/underweight to Corporates can be attractive; market may provide opportunities for significant value added
  - Long Term Corporates offer a consistent yield advantage
  - Lower credit quality Corporates offer greater opportunity for value added
  - Provincials have greater volatility (a result of greater duration), yet greater degree of downside protection
  - Current yield spreads are not attractive from a historical perspective
  - Forward looking assumptions suggest Corporates may offer opportunity for enhanced returns

Considerations

- Considerations
  - Understand impact of more Corporates on reserve targets (i.e. MCT implications of lower credits)
  - Understand impact of Corporates vs Provincials on liability matching strategy, including recursivity
    - Changes to the portfolio duration, yield and structure may trigger a change to the discount rate, and possibly hinder the hedging strategy
    - See Phase I for a more in-depth discussion
  - Tactical vs. Strategic
    - Strategic allocations easy to implement and monitor, but less compelling
    - Tactical allocations require judgment and clear parameters to properly monitor and assess; however more compelling for market based reasons and MPI specific reasons
  - Treasury's comfort and resources regarding credit analysis and trading corporate issues is important

Recommendations

- Adopt acceptable ranges of Corporate bonds within the Fund's Asset Allocation targets
  - Section VII of the IPS targets marketable universe bonds at 29% and marketable long bonds at 10%
  - IPS does not include minimums and maximums for Corporate bond exposure
  - Setting a range would be an effective tool of increasing the Corporate bond exposure and facilitating future tactical exposures
- Provide Treasury with strategic and tactical guidance
  - Communicate views (i.e., greater Corporate bond exposure may increase long term returns, help achieve long term objectives)
  - Communicate interest in exposures to lower quality credit, respecting the minimum credit rating of A Low as defined in the IPS, and longer term Corporates, as these segments offer the greatest yield advantages and potential for value added over Provincial bonds
  - Indicate expectation that Treasury employ tactical under- and over-weights to take advantage of favorable market conditions

Alternative Indices and Style Investing

- Section 2.05 – Item (k)

Alternative Indices and Style Investing

Section 2.05 (k) What is the optimal style strategy? And what is the potential for using alternative index/beta strategies?

- MPI Equity Portfolio – Distinct Style Bias
  - Canadian Equity
    - Cardinal Capital – Large Cap Value/Dividend
    - Foyston – Large Cap Value/Quality
    - QV – Small Cap Value/Quality
    - S&P/TSX Composite - Passive
  - U.S. Equities
    - Russell 1000 Value Index – Large Cap
    - Russell 2000 Value Index – Small Cap

…Alternative Indices and Style Investing

- Market Peer Comparison – January 2014 Russell Survey of 181 asset owners (13% from Canada)
    - 9% of asset owners under $1 billion use alternative beta
    - 30% of asset owners between $1 - $10 billion use alternative beta
    - 46% of asset owners over $10 billion use alternative beta
    - 24% of North American asset owners use alternative beta
- Select Peer Comparison
    - SGI Canadian Equity – Value and Core/GARP (No alternative indices)
    - SGI U.S. Equity – Growth (No alternative indices)

What Are Alternative Indices?

Alternative Indices

- Weight stocks by factors other than Market Cap.
- Aim to produce better risk adjusted results.

Alternative Risk Premia

Historical price information | Fundamental accounting data

- Stock characteristics assessed individually and included in portfolio based on that assessment.
- All stocks included in the portfolio, but with different weights.
- **E.g. low volatility or value premium.**

Enhanced Portfolio Diversification

Basic | Optimised

- Stock characteristics assessed based on interactions with other stocks and how best they can be combined.
- If unconstrained, can result in a significant reduction in number of stocks held.
- **E.g. Equal risk or maximum diversification**.

Predominate Market Theme:

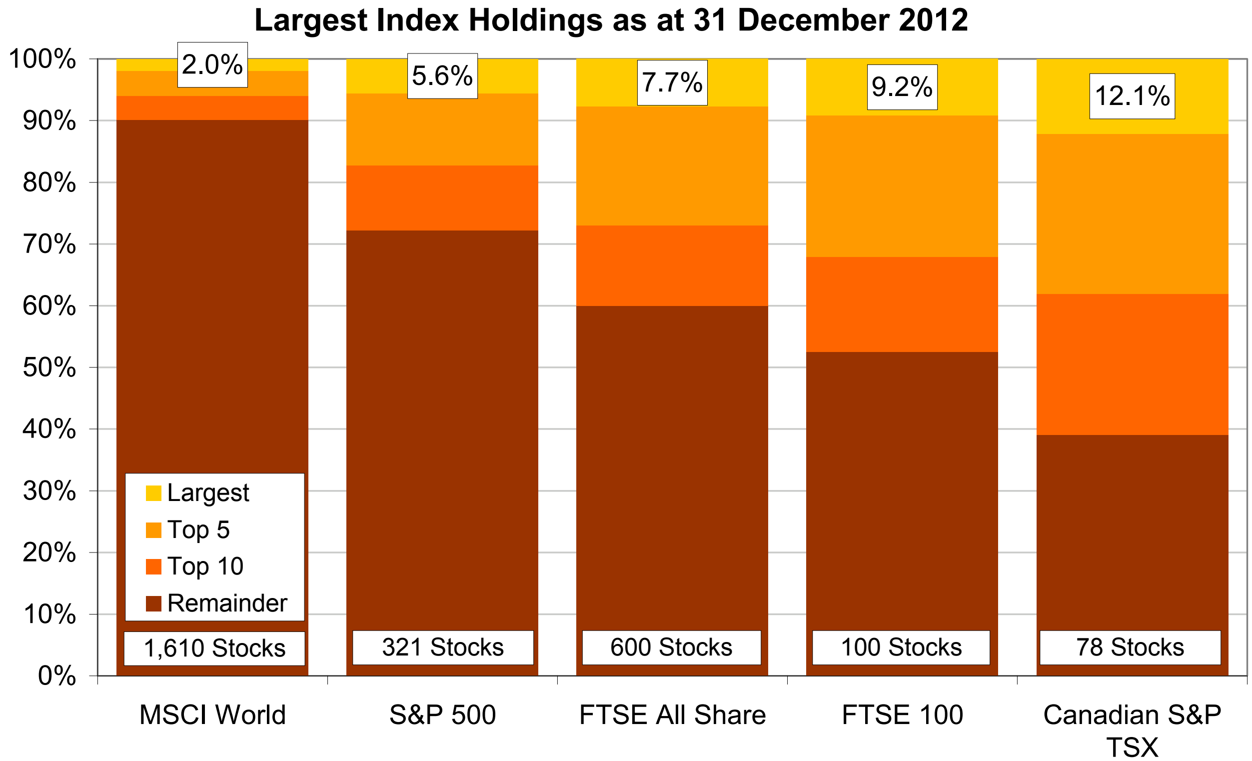
- Easy to understand;
- Result in a complete index (as opposed to a subset / sample);
- Any manager *could* implement; and
- Straightforward passive replacements.

Market-cap Indices vs Alternative Indices

Why Investors Are Interested?

- Many Aon Hewitt clients invest through passive equity strategies
- The choice of which index to track is therefore very important
  - This choice is an ‘active’ decision
  - And may be investing primarily in a relatively small number of stocks

…Market-cap Indices vs Alternative Indices
…Why Investors Are Interested?



Index weights as at 31/12/12
Source: FTSE, Datastream

- Alternative Indices are a logical consideration for passive investors
  - Address diversification shortfalls of market cap indices

…Market-cap Indices vs Alternative Indices

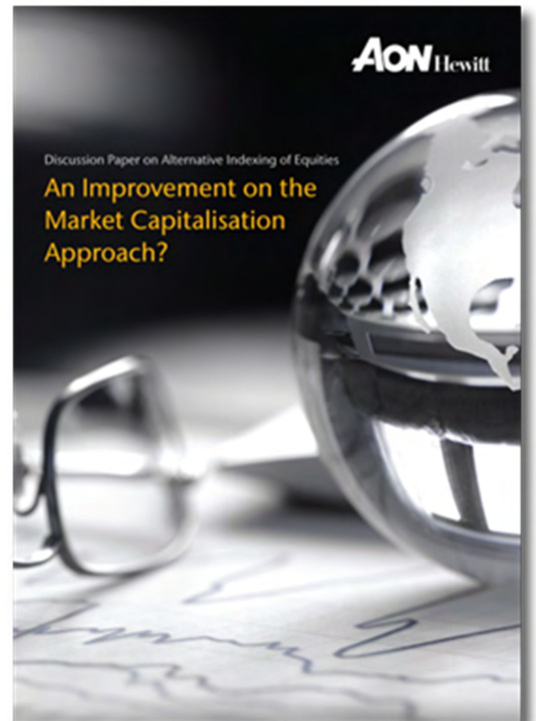
The case for market cap indices	The case for alternative indices
▪ Easy to understand ▪ Easy to construct ▪ Broad diversification (usually) ▪ High liquidity and scalability ▪ Low turnover ▪ Low transaction costs	▪ Most research shows higher risk-adjusted return (long term) ▪ Can avoid price-driven “bubbles” ▪ Cheap way of accessing “risk premia” ▪ Lower cost than active quant managers ▪ Modest cost premium to standard passive

Alternative Indices
What the Critics and Proponents Say

Criticism	Response
The extra returns are because of extra risk	Can be true, but does not explain all return
Alternatives involve higher turnover	True – but not enough to eliminate benefit
Strong back-tests prove nothing	Live track records are available
Fees are higher than passive	Fees are falling and only slightly above passive
There are few pooled funds available	Institutional vehicles are more commonplace
It's a marketing fad – old wine in new bottles	It's an old idea which seems to work!
Can underperform for extended periods	Superior long term return/risk results
Potentially greater exposure in illiquid stocks	Can screen for less liquid stocks
Higher Total Expense Ratios	Recovered through higher returns

Cass Business School/Aon Hewitt Research

- In 2012 Aon Hewitt launched a research initiative on alternative indexation
- Initiative began with a discussion piece on improving on the market capitalization approach (Attached in Appendix A)
- Aon Hewitt commissioned a major study on alternative indexation - 2013 City University of London CASS Business School to conduct an evaluation of alternative equity indices (Attached in Appendix B)
- The results of the research were striking – in the 1970s, 1980s & 2000s – **all of the alternative indices outperformed**
- Almost half of these indices outperformed with lower volatility
- However, in the bull market of the 1990s, **market cap-weighted indices beat the alternative indices**



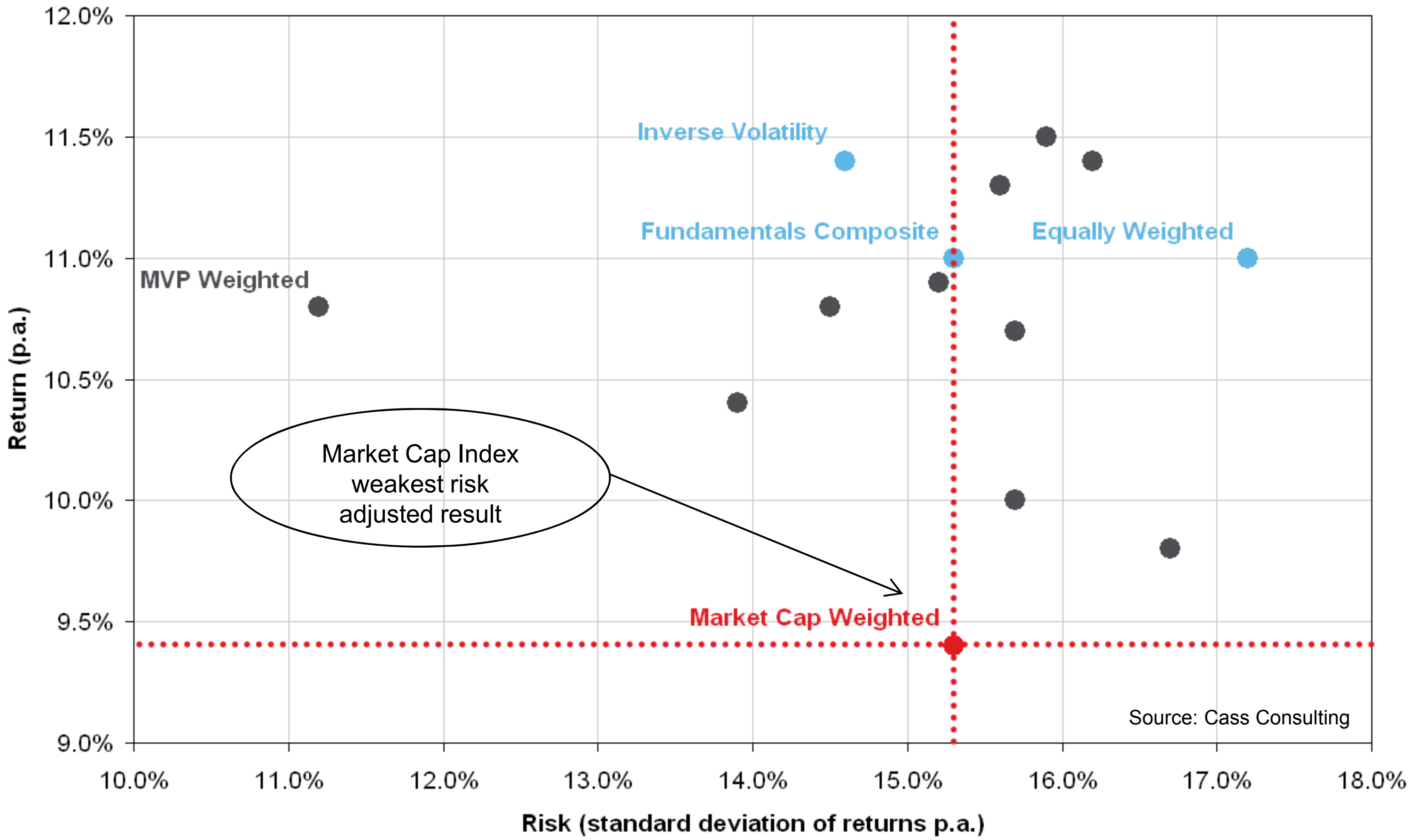
Cass Business School/Aon Hewitt Research Results

Annualized Returns 1969 to 2011

- Performance analysis on alternative indices using the largest 1000 U.S. stocks every year from 1968 to 2011(42 years)
- Eight risk and diversification based indices and four fundamental based indices were developed and tested
- Fundamental based indices were combined to create a composite index
- Market Cap Weighted indices demonstrated the lowest long term return
- All Alternative Indices dominate Market Cap in terms of risk adjusted returns
  - In all cases, risk (measured by volatility of returns) is better rewarded
  - Additional returns from stock size, a value premium and low volatility
- Removal of large cap bias a bi-product of alternative weighting

…Cass Business School/Aon Hewitt Research Results

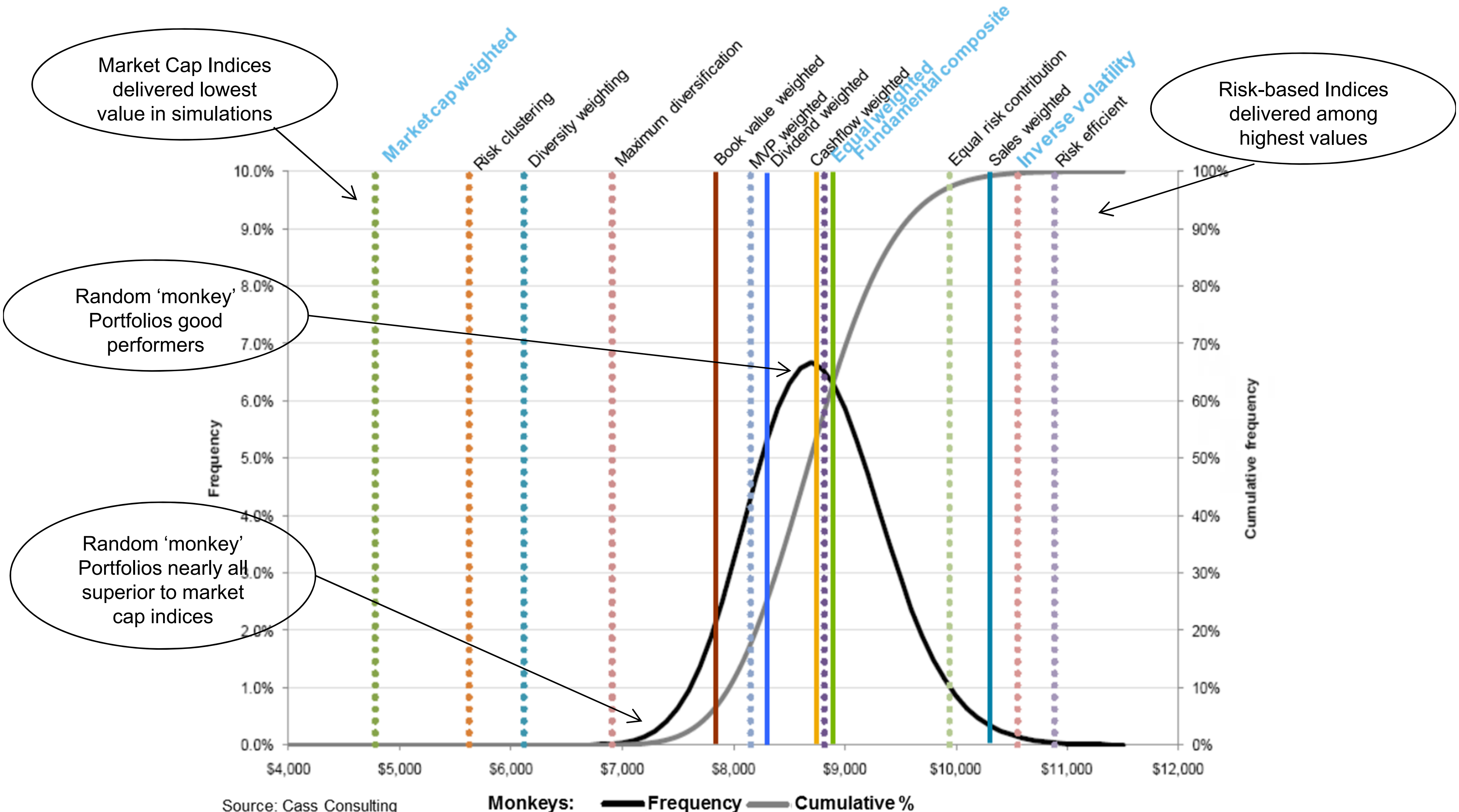
…Annualized Returns 1969 to 2011



…Cass Business School/Aon Hewitt Research Results

- Further testing was conducted to ensure alternative indexing superior results were not a product of randomness
- Measured growth of $100 over the 42 years for each alternative index methodology
- Developed a random index approach “ 1000 monkeys picking a 1000 stock” portfolio
- Computer simulation program randomly selected stocks 1000 times, assigning a 0.1% weight per selection, until the portfolios had a weight of 100%
- Simulation ran 10 million times per year
- Following page charts the terminal value of each alternative index methodology and the cumulative results and frequency of results for the random ‘monkey’ portfolios
- Results
  - Market cap had lowest terminal value of just under $5,000
  - Risk based alternative indices were among the best at over $10,000
  - Median random monkey portfolios near $8,700
  - Nearly all monkey portfolios superior to market cap indices
  - Market cap weight indices are inferior to other index methodologies

…Cass Business School/Aon Hewitt Research Results



Source: Cass Consulting

…Cass Business School/Aon Hewitt Research Results

	Mean Return	Standard Deviation	Sharpe Ratio
Market Cap-Weighted	**9.4%**	**15.3%**	**0.32**
Equally-Weighted	11.0%	17.2%	0.39
Diversity-Weighted	10.0%	15.7%	0.35
Inverse Volatility-Weighted	11.4%	14.6%	0.45
Equal Risk Contribution	11.3%	15.6%	0.43
Risk Clustering	9.8%	16.7%	0.33
Minimum Variance Portfolio	10.8%	11.2%	0.50
Maximum Diversification	10.4%	13.9%	0.40
Risk Efficient	11.5%	15.9%	0.40
Fundamentally-Weighted	11.0%	15.3%	0.41

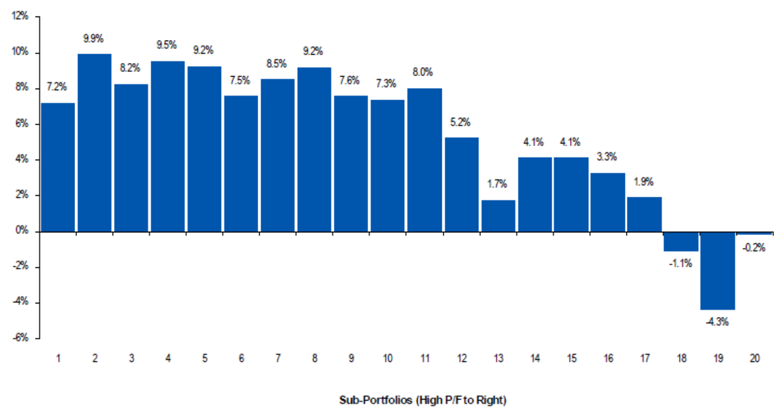
- Of the 9 alternative indices studied, all have a higher return and 4 have lower volatility
- All 9 have a higher Sharpe Ratio (defined as the portfolio return minus the risk free rate of return, divided by the portfolio standard deviation)

Market Research

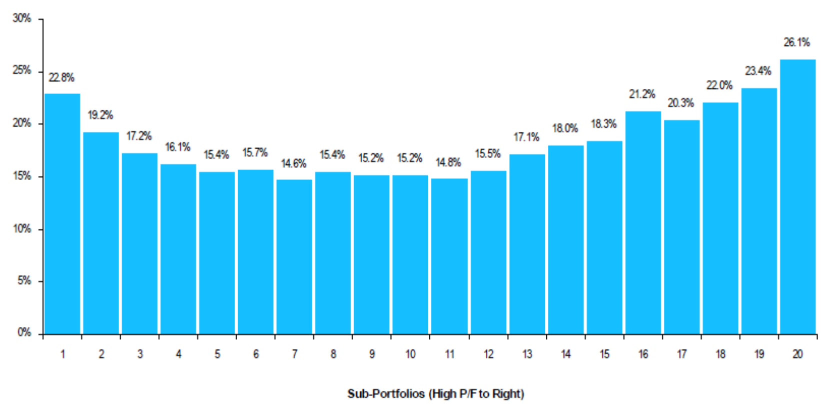
Optimal Style Factors

Value Pays

Valuation-Sorted Returns
MSCI World Sub-Portfolio Annualized US$ Returns
(April 1989 – December 2011)

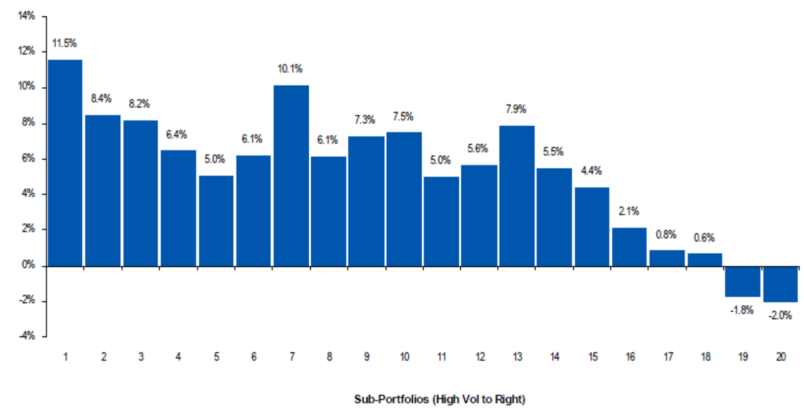


Valuation-Sorted Return Volatility
MSCI World Sub-Portfolio Annualized US$ Return Volatility
(April 1989 – December 2011)

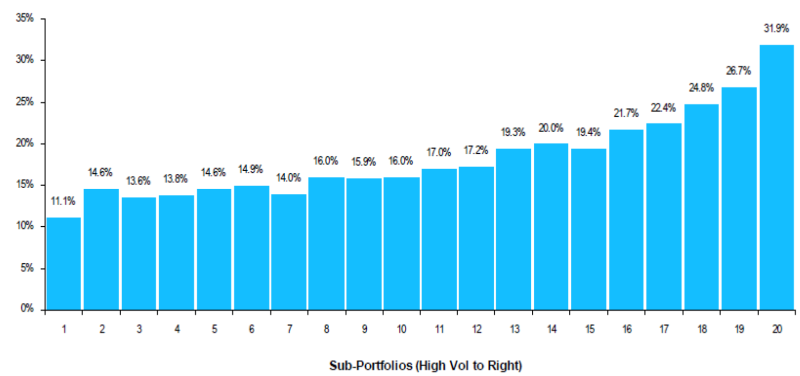


Low Volatility Pays

Volatility-Sorted Returns
MSCI World Sub-Portfolio Annualized US$ Returns
(April 1989 – December 2011)



Volatility-Sorted Return Volatility
MSCI World Sub-Portfolio Annualized US$ Return Volatility
(April 1989 – December 2011)

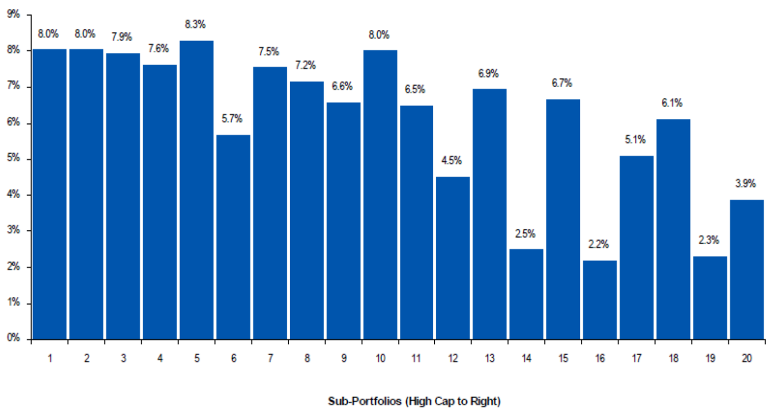


Source: State Street Global Advisors

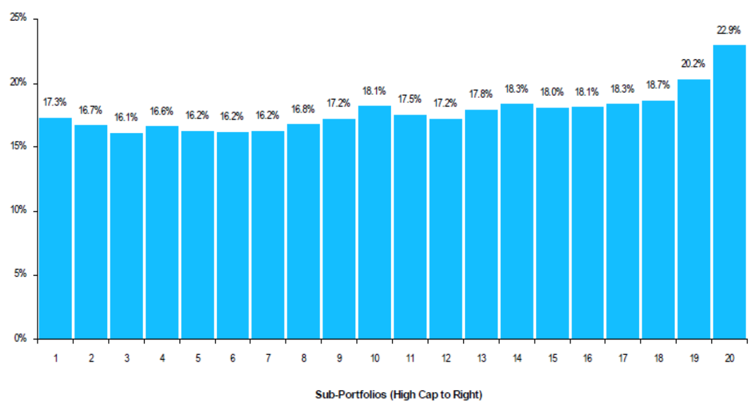
…Market Research
…Optimal Style Factors

Small Size Pays

Size-Sorted Returns
MSCI World Sub-Portfolio Annualized US$ Returns
(April 1989 – December 2011)

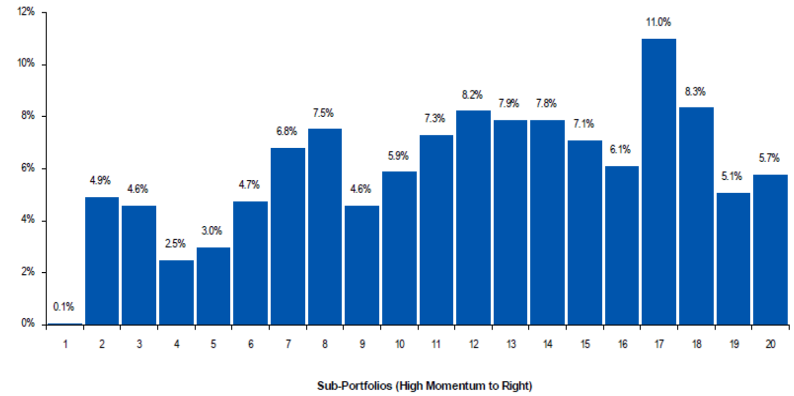


Size-Sorted Return Volatility
MSCI World Sub-Portfolio Annualized US$ Return Volatility
(April 1989 – December 2011)

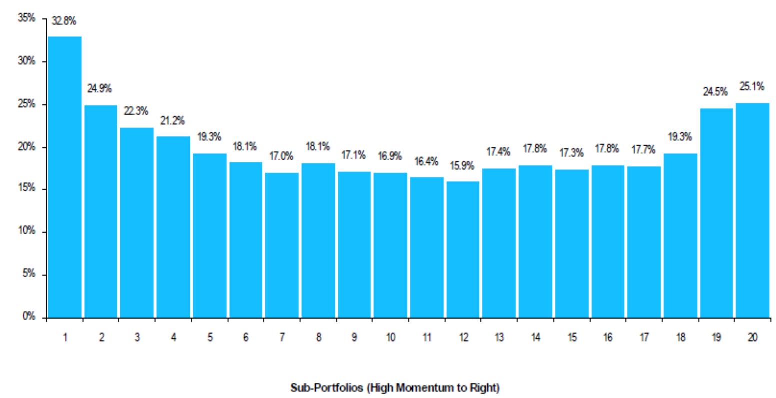


Momentum Pays

Momentum-Sorted Returns
MSCI World Sub-Portfolio Annualized US$ Returns
(April 1989 – December 2011)



Momentum-Sorted Return Volatility
MSCI World Sub-Portfolio Annualized US$ Return Volatility
(April 1989 – December 2011)

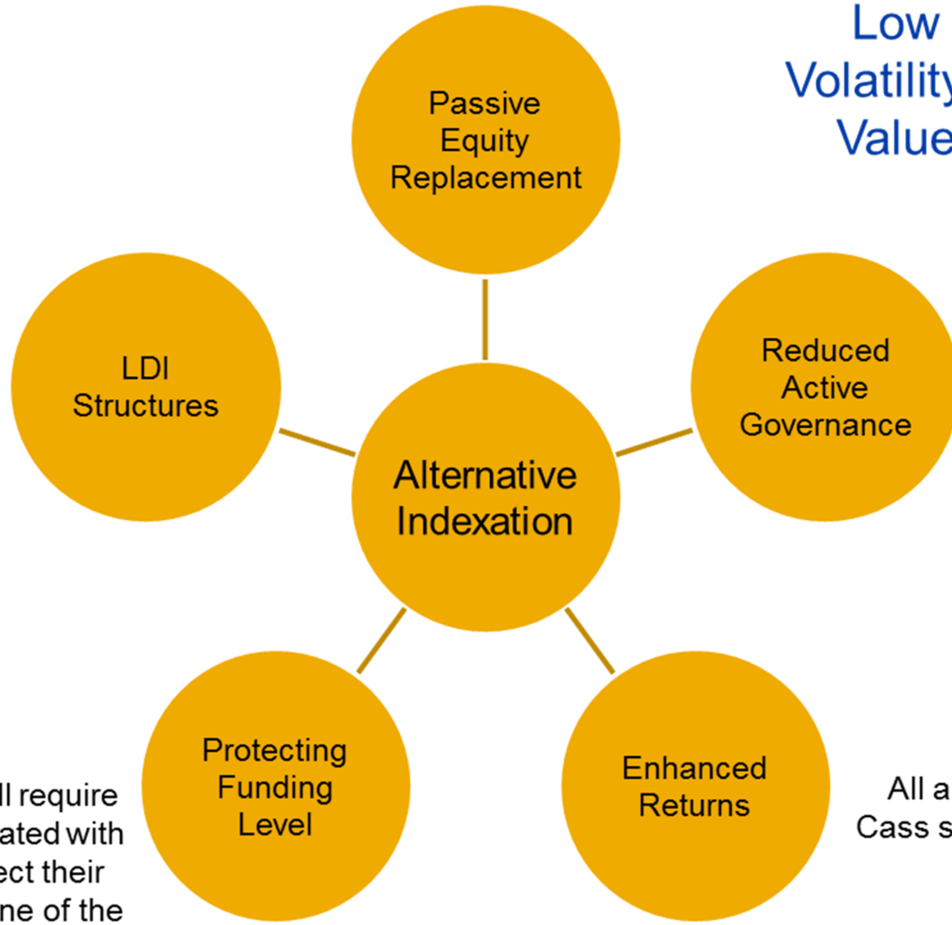


Source: State Street Global Advisors

Which Ideas Might Be Attractive to Which Investors?

Investors looking to diversify their existing passive equities could consider putting part of their equities into an alternative index

Low Volatility & Value



Clients with LDI structures looking for their return seeking assets to outperform LIBOR might find low volatility equities attractive

Replacement of, or addition to, active Equity portfolio with reduced governance requirement

Low Volatility

Well funded clients that still require the outperformance associated with equities may wish to protect their funding level by adopting one of the low volatility alternatives

All alternatives in the Cass study outperformed Market Cap

Key Risks and Considerations

- Returns Differentials – alternative indices can underperform (and outperform) passive market cap indices, sometimes for long periods, sometimes with very high tracking error
- Governance – it is important fiduciaries have a good rationale for the decision, and monitor the outcome
- Choice of index – expectations around future performance and time horizon should be set in advance
- Cost – alternative beta costs are lower than for active management, but slightly higher than standard passive management, transaction costs are higher for alternative beta relative to passive strategies
- Track record – the alternative beta market is still relatively immature, and some funds are small

Alternative Indexation
Too Much Information?

Value

- FTSE RAFI
- Russell Fundamental
- FTSE GWA
- MSCI Value Weighted
- MSCI High Dividend Yield
- S&P Dividend Aristocrats
- S&P Buyback
- Russell High Dividend Yield
- STOXX Select Dividend
- STOXX Minimum Dividend
- VTL Associates Revenue

Profitability / Quality

- MSCI Quality
- STOXX Strong Quality
- STOXX Strong Balance Sheet

Momentum

- MSCI Momentum
- S&P Momentum

Low Volatility

Optimisation

- MSCI Minimum Volatility
- FTSE Global Minimum Variance
- FTSE Equal Risk Contribution
- STOXX Minimum Variance
- FTSE EDHEC-Risk Efficient
- EDHEC Diversified Risk Parity
- EDHEC Maximum Decorrelation
- EDHEC Efficient Minimum Volatility
- EDHEC Efficient Max Sharpe

Target

- MSCI Risk Control
- S&P Risk Control
- FTSE StableRisk
- Russell Volatility Control
- STOXX Risk Control

Heuristic

- MSCI Risk Weighted
- RAFI Low Volatility
- S&P Low Volatility
- Russell-Axioma Factor

Hybrid

- Russell Stability
- Russell High Efficiency Defensive
- MSCI Multi-Factor
- MSCI Quality Mix
- MSCI Market Neutral Barra Factor
- FTSE TOBAM Maximum Diversification
- FTSE Value Stocks
- S&P Factor Tilts
- S&P Global Intrinsic Value
- S&P Low Volatility High Dividend
- MSCI Equal Weighted
- S&P Equal Weight
- STOXX Equal Weight
- EDHEC Maximum Deconcentration

Macro exposure

Economic exposure

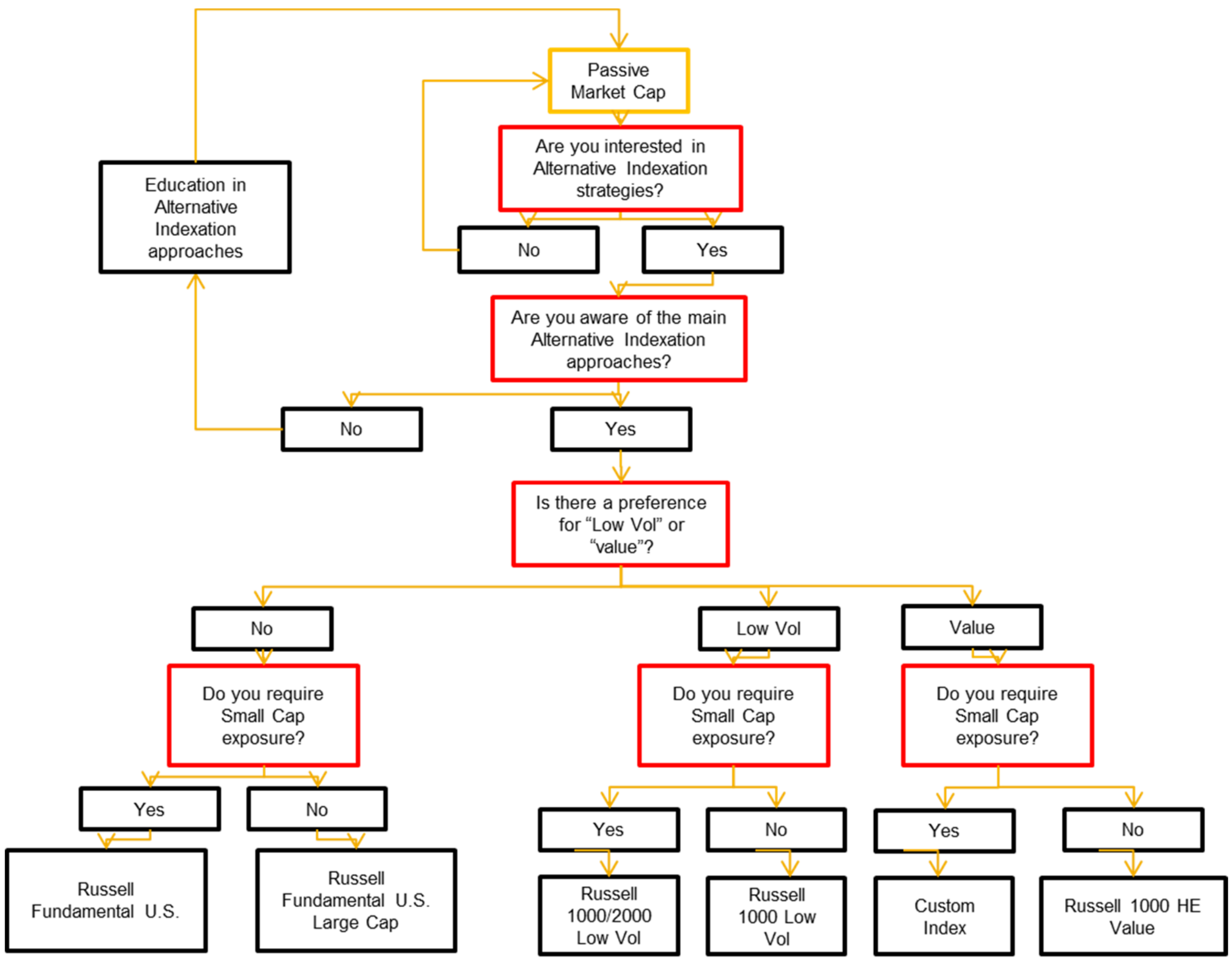
- MSCI Economic Exposure
- MSCI GDP Weighted
- FTSE GDP Weighted
- Russell Geographic Exposure
- STOXX Global EM Exposed
- S&P GIVI GDP Weighted
- FTSE Diversification Based Investing

Commodity exposure

- MSCI Commodity Producers Sector Capped
- MSCI Agriculture & Food Chain Sector Capped

Source: USB

Alternative Indexation Decision Tree
Sample



Investment Management
Progression

- First decision: most suitable Investment management approach
- Currently MPI has Canadian Eq – Core Active and U.S. Eq - Passive

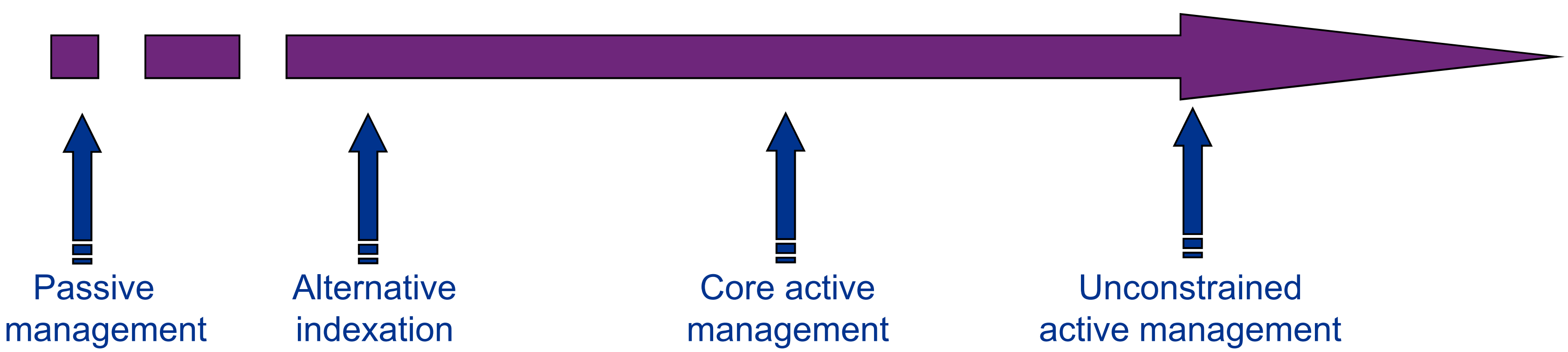
Passive Management	Alternative Indexation	Core Active Management	High Performance Active Management	Unconstrained Active Management
Target return: Market index	**Target return:** Market index	**Target return:** Market index + 1.0% - 1.5%	**Target return:** Market index + 2.0% - 4.0%	**Target return:** As agreed by the Client

Cheaper

Benchmark focused

More Expensive

Pay little regards to the benchmark



Observations

- Market Cap indices (and passive strategies) heavily concentrated in a few names
- Alternative indices methodologies offer greater diversification and opportunity to access 'risk premia'
- Cass Business School/Aon Hewitt Research
  - Alternative indices have delivered superior risk-adjusted returns over long time periods
  - Alternative indices have been superior due to greater influence of three primary factors:
    - Size – Smaller cap
    - Valuation – Lower valuation
    - Volatility – Lower volatility
  - Alternative indices trailed during bull markets
- Market Research has identified four factors that drive outperformance
  - Value, Low Volatility, Momentum, Small Size
- Selection of alternate index or factor strategies dependent on investors' objectives

Conclusions

- Alternative indexing is superior to market cap weighted indexation
- Alternative index strategies should be employed where active management is not favoured
- The U.S. equity passive market cap weighted investment strategies (Russell 1000 Value and Russell 2000 Value) are an inefficient way to capture the value and size risk premia
- The Canadian equity passive market cap weighted investment strategy is an inefficient way to obtain market exposure
  - May not be necessary if Canadian equities are reduced as recommended in the AL study
- Canadian equity exposure to value and small cap actives mandates are appropriate and supportable
  - Smaller Canadian equity investable universe more difficult to dissect into style buckets
  - Small cap mandates in Canadian markets are truly small cap in nature

Recommendations

- Discontinue Canadian equity passive mandate, allocate funds from liquidated mandate in conjunction with implementation of new policy asset mix targets
- For the U.S. equity allocation, determine objectives
  - Determine suitable investment approach – passive, alternative index, active (pg. 48)
  - Determine preferences for style/factor exposures (i.e., low volatility, small cap, value)
  - Research and select appropriate index, strategy and manager

Withdrawal Policies

- Section 2.05 – Item (l)

Withdrawal Policies

Section 2.05 (l) – How should the Investment Fund handle withdrawals?

- The MPI Insurance Fund and Pension Plan key characteristics
  - Large asset bases
  - Diversified asset mix
  - Diversified set of managers
  - Pension and insurance assets comingled in the fund
  - Insurance Fund is cashflow negative
  - Cashflows impacted by multiple variables
- Withdrawal Policies required to reflect characteristics, incorporating the following principles
  - Policy Target weights are the key driver of long term performance
  - Largest overweights from policy target weights primary source for withdrawals
  - Illiquid assets generally excluded from withdrawals

…Withdrawal Policies

- Withdrawal Policies required to reflect characteristics, incorporating the following principles (cont.)
  - Follow set parameters for normal course withdrawals
  - Management judgment required for large or irregular withdrawals (i.e., when RSR level is above upper target)
  - Management requires flexibility to address unique circumstance that may arise
  - Withdrawals of corporate funds, without affecting pension plan assets, are permissible to fund corporate operations
- Revised cash withdrawal policies to be included in the draft Investment Policy Statement

Investment Policy Statement Review

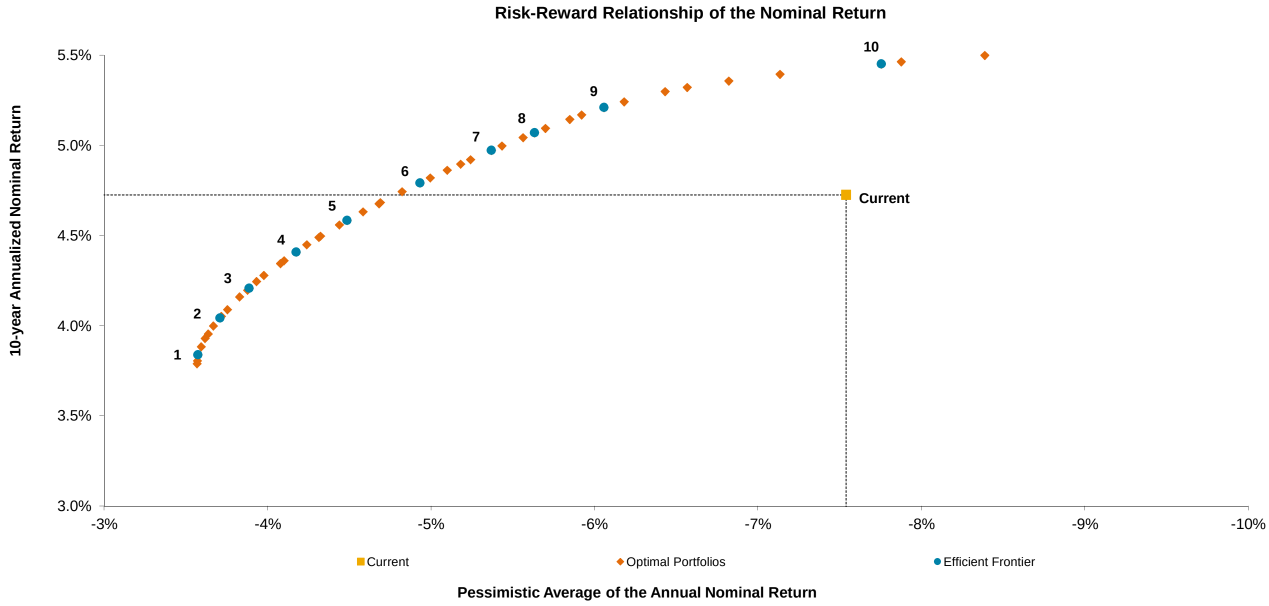
- Section 2.05 – Item (m)

Investment Policy Statement Review

Section 2.05 (m) – Identify areas where the IPS is not consistent with current best practices and provide recommendations for improvement

- An Investment Policy Statement Review will be completed as a follow-up to Phase II
- The review is best performed after major decisions on asset mix, matching approach and implementation of the investment strategy are made
- MPI may wish to have certain changes reflected in the IPS now, or at a later date
- The review will address:
  - Industry best practices
  - Required periodic updates
  - Practical language enhancements
  - Potential changes related to the outcome of the AL study

Legal Disclaimer



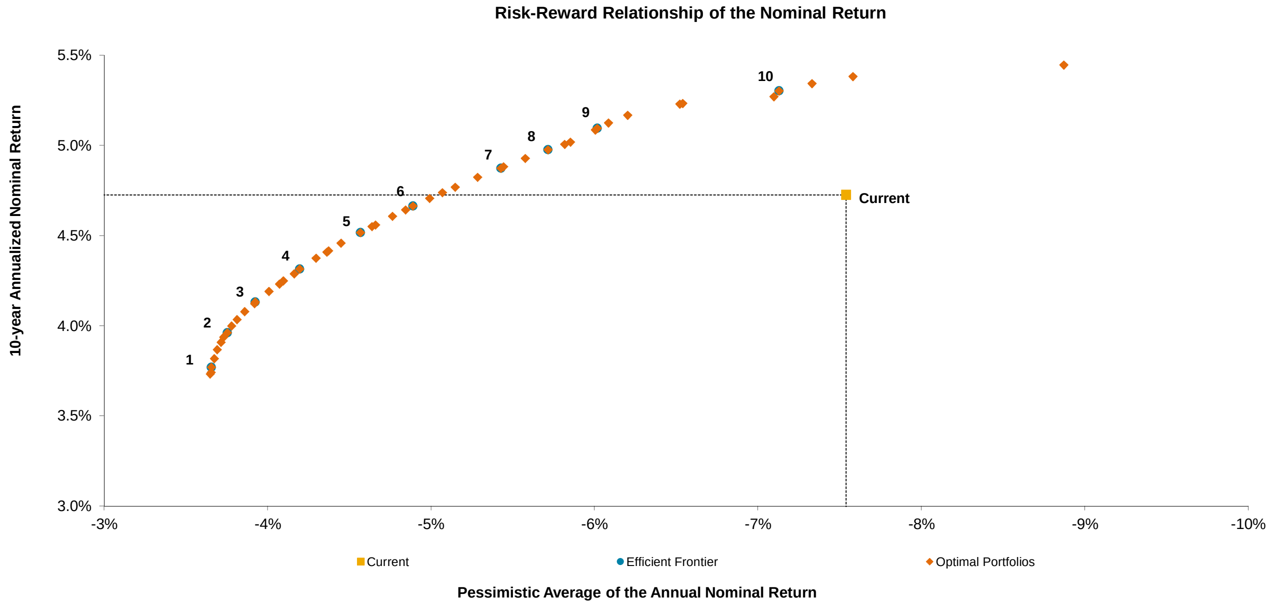
Risk-Reward Relationship of the Nominal Return

Portfolio	1	2	3	4	5	6	7	8	9	10	Current
10-year annualized nominal return	3.8%	4.0%	4.2%	4.4%	4.6%	4.8%	5.0%	5.1%	5.2%	5.5%	4.7%
Pessimistic average of the annual nominal return	-3.6%	-3.7%	-3.9%	-4.2%	-4.5%	-4.9%	-5.4%	-5.6%	-6.1%	-7.8%	-7.5%
Volatility	3.6%	3.7%	3.9%	4.1%	4.3%	4.6%	4.9%	5.0%	5.3%	6.0%	5.5%
Probability {Annual return < 0%}	14.0%	13.2%	13.2%	13.5%	13.6%	14.1%	14.4%	14.6%	15.1%	16.9%	17.9%

* Average of the 50/1000 worst simulations.

Optimal Portfolios Allocations

Portfolio	1	2	3	4	5	6	7	8	9	10	Current
Fixed Income Component											
Current Fixed Income Portfolio	**64.0%**	**61.0%**	**62.0%**	**61.0%**	**59.0%**	**57.0%**	**59.0%**	**58.0%**	**55.0%**	**55.0%**	**60.0%**
Total Fixed Income Component	**64.0%**	**61.0%**	**62.0%**	**61.0%**	**59.0%**	**57.0%**	**59.0%**	**58.0%**	**55.0%**	**55.0%**	**60.0%**
Growth Component - Fixed Income											
Mortgages	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	0.0%	0.0%	0.0%	0.0%	0.0%
Global Bonds	**2.0%**	**2.0%**	**2.0%**	**1.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
High Yield Bonds	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bank Loans	**1.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Emerging Market Debt	**2.0%**	**3.0%**	**1.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total GC - Fixed Income	**10.0%**	**10.0%**	**8.0%**	**6.0%**	**5.0%**	**5.0%**	0.0%	0.0%	0.0%	0.0%	0.0%
Growth Component - Equities											
Canadian Equities	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**15.0%**
Canadian Equities, Low Vol	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Canadian Equities, Small Cap	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
U.S. Equities	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**1.0%**	0.0%	**5.0%**
U.S. Equities, Low Vol	**5.0%**	**7.0%**	**8.0%**	**9.0%**	**10.0%**	**10.0%**	**10.0%**	**10.0%**	**10.0%**	**5.0%**	0.0%
U.S. Equities, Small Cap	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**1.0%**	0.0%
International Equities	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**7.0%**	0.0%
International Equities, Low Vol	**6.0%**	**6.0%**	**4.0%**	**4.0%**	**4.0%**	**2.0%**	**3.0%**	**2.0%**	**3.0%**	0.0%	0.0%
International Equities, Small Cap	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**2.0%**	0.0%
Emerging Market Equities	0.0%	0.0%	**1.0%**	**2.0%**	**2.0%**	**3.0%**	**4.0%**	**5.0%**	**6.0%**	**6.0%**	0.0%
Emerging Market Equities, Low Vol	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total GC - Equities	**11.0%**	**13.0%**	**13.0%**	**15.0%**	**16.0%**	**15.0%**	**17.0%**	**17.0%**	**20.0%**	**21.0%**	**20.0%**
Growth Component - Alternatives											
Commodities	**2.0%**	**1.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Canadian Direct Real Estate	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**13.0%**
U.S. Real Estate	**1.0%**	**2.0%**	**3.0%**	**2.0%**	**3.0%**	**5.0%**	**5.0%**	**6.0%**	**6.0%**	**7.0%**	0.0%
Global REITS	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Global Listed Infrastructure	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Direct Infrastructure	**2.0%**	**2.0%**	**2.0%**	**3.0%**	**3.0%**	**3.0%**	**4.0%**	**4.0%**	**4.0%**	**7.0%**	**7.0%**
Private Equity	0.0%	**1.0%**	**2.0%**	**3.0%**	**4.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	0.0%
Farmlands	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Timberlands	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	0.0%	0.0%
Total GC - Alternatives	**15.0%**	**16.0%**	**17.0%**	**18.0%**	**20.0%**	**23.0%**	**24.0%**	**25.0%**	**25.0%**	**24.0%**	**20.0%**
Total Fixed Income Component	**64.0%**	**61.0%**	**62.0%**	**61.0%**	**59.0%**	**57.0%**	**59.0%**	**58.0%**	**55.0%**	**55.0%**	**60.0%**
Total GC - Fixed Income	**10.0%**	**10.0%**	**8.0%**	**6.0%**	**5.0%**	**5.0%**	0.0%	0.0%	0.0%	0.0%	0.0%
Total GC - Equities	**11.0%**	**13.0%**	**13.0%**	**15.0%**	**16.0%**	**15.0%**	**17.0%**	**17.0%**	**20.0%**	**21.0%**	**20.0%**
Total GC - Alternatives	**15.0%**	**16.0%**	**17.0%**	**18.0%**	**20.0%**	**23.0%**	**24.0%**	**25.0%**	**25.0%**	**24.0%**	**20.0%**
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**



Risk-Reward Relationship of the Nominal Return

Portfolio	1	2	3	4	5	6	7	8	9	10	**Current**
10-year annualized nominal return	3.8%	4.0%	4.1%	4.3%	4.5%	4.7%	4.9%	5.0%	5.1%	5.3%	4.7%
Pessimistic average of the annual nominal return	-3.7%	-3.8%	-3.9%	-4.2%	-4.6%	-4.9%	-5.4%	-5.7%	-6.0%	-7.1%	-7.5%
Volatility	3.7%	3.8%	3.9%	4.1%	4.4%	4.6%	4.8%	5.0%	5.2%	5.7%	5.5%
Probability {Annual return < 0%}	14.7%	13.7%	13.6%	13.6%	14.3%	14.6%	14.9%	15.0%	15.2%	15.9%	17.9%

* Average of the 50/1000 worst simulations.

Optimal Portfolios Allocations

Portfolio	1	2	3	4	5	6	7	8	9	10	**Current**
Fixed Income Component											
Current Fixed Income Portfolio	**66.0%**	**62.0%**	**62.0%**	**60.0%**	**60.0%**	**60.0%**	**60.0%**	**59.0%**	**55.0%**	**55.0%**	**60.0%**
Total Fixed Income Component	**66.0%**	**62.0%**	**62.0%**	**60.0%**	**60.0%**	**60.0%**	**60.0%**	**59.0%**	**55.0%**	**55.0%**	**60.0%**
Growth Component - Fixed Income											
Mortgages	**10.0%**	**10.0%**	**9.0%**	**8.0%**	**6.0%**	**4.0%**	**1.0%**	0.0%	**1.0%**	0.0%	0.0%
Global Bonds	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
High Yield Bonds	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bank Loans	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Emerging Market Debt	0.0%	0.0%	**1.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total GC - Fixed Income	**10.0%**	**10.0%**	**10.0%**	**8.0%**	**6.0%**	**4.0%**	**1.0%**	0.0%	**1.0%**	0.0%	0.0%
Growth Component - Equities											
Canadian Equities	0.0%	0.0%	**1.0%**	**1.0%**	**1.0%**	**1.0%**	**3.0%**	**3.0%**	**2.0%**	**7.0%**	**15.0%**
Canadian Equities, Low Vol	**3.0%**	**4.0%**	**3.0%**	**4.0%**	**4.0%**	**4.0%**	**2.0%**	**2.0%**	**5.0%**	0.0%	0.0%
Canadian Equities, Small Cap	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
U.S. Equities	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**5.0%**
U.S. Equities, Low Vol	**3.0%**	**4.0%**	**6.0%**	**7.0%**	**9.0%**	**9.0%**	**8.0%**	**8.0%**	**10.0%**	**7.0%**	0.0%
U.S. Equities, Small Cap	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
International Equities	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**2.0%**	0.0%
International Equities, Low Vol	**3.0%**	**4.0%**	**1.0%**	**2.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
International Equities, Small Cap	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Emerging Market Equities	0.0%	0.0%	**1.0%**	**1.0%**	**1.0%**	**1.0%**	**2.0%**	**2.0%**	**3.0%**	**4.0%**	0.0%
Emerging Market Equities, Low Vol	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total GC - Equities	**9.0%**	**12.0%**	**12.0%**	**15.0%**	**15.0%**	**15.0%**	**15.0%**	**15.0%**	**20.0%**	**20.0%**	**20.0%**
Growth Component - Alternatives											
Commodities	**2.0%**	**2.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Canadian Direct Real Estate	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**13.0%**
U.S. Real Estate	**2.0%**	**1.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**5.0%**	**6.0%**	**5.0%**	**7.0%**	0.0%
Global REITS	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Global Listed Infrastructure	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**1.0%**	**1.0%**	0.0%	0.0%	0.0%
Direct Infrastructure	**1.0%**	**2.0%**	**2.0%**	**2.0%**	**2.0%**	**3.0%**	**3.0%**	**4.0%**	**4.0%**	**6.0%**	**7.0%**
Private Equity	0.0%	**1.0%**	**1.0%**	**2.0%**	**4.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	0.0%
Farmlands	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Timberlands	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**	**2.0%**	0.0%
Total GC - Alternatives	**15.0%**	**16.0%**	**16.0%**	**17.0%**	**19.0%**	**21.0%**	**24.0%**	**26.0%**	**24.0%**	**25.0%**	**20.0%**
Total Fixed Income Component	**66.0%**	**62.0%**	**62.0%**	**60.0%**	**60.0%**	**60.0%**	**60.0%**	**59.0%**	**55.0%**	**55.0%**	**60.0%**
Total GC - Fixed Income	**10.0%**	**10.0%**	**10.0%**	**8.0%**	**6.0%**	**4.0%**	**1.0%**	0.0%	**1.0%**	0.0%	0.0%
Total GC - Equities	**9.0%**	**12.0%**	**12.0%**	**15.0%**	**15.0%**	**15.0%**	**15.0%**	**15.0%**	**20.0%**	**20.0%**	**20.0%**
Total GC - Alternatives	**15.0%**	**16.0%**	**16.0%**	**17.0%**	**19.0%**	**21.0%**	**24.0%**	**26.0%**	**24.0%**	**25.0%**	**20.0%**
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Asset Only Optimization 1

Illiquid	Inflation Sensitive	Asset Class	Minimum	Maximum
		MPI Current Fixed Income Portfolio	**55.0%**	**75.0%**
		Mortgages	0.0%	5.0%
		Global Bonds	0.0%	5.0%
		High Yield Bonds	0.0%	5.0%
		Bank Loans	0.0%	5.0%
		Emerging Market Debt	0.0%	5.0%
		Total Growth Component Fixed Income	**0.0%**	**10.0%**
		Canadian Equities	0.0%	20.0%
		Canadian Equities, Low Vol	0.0%	20.0%
		Total Canadian Large Cap & Low Vol Equities ***(as % of Total Equities)***	n/a	n/a
		Canadian Equities, Small Cap *(as % of other Canadian Equities)*	0.0%	33.3%
		U.S. Equities	0.0%	20.0%
		U.S. Equities, Low Vol	0.0%	20.0%
		U.S. Equities, Small Cap *(as % of other U.S. Equities)*	0.0%	33.3%
		International Equities	0.0%	20.0%
		International Equities, Low Vol	0.0%	20.0%
		International Equities, Small Cap *(as % of other International Equities)*	0.0%	33.3%
		Emerging Markets Equities	0.0%	10.0%
		Emerging Markets Equities, Low Vol	0.0%	10.0%
		Total Emerging Market Equities *(as % of Large Cap & Low Vol Foreign Equities)*	**0.0%**	**50.0%**
		Total Equities	**5.0%**	**30.0%**
	✓	Commodities	0.0%	5.0%
✓	✓	Canadian Direct Real Estate	5.0%	20.0%
✓	✓	U.S. Real Estate	0.0%	20.0%
		Global REITS	0.0%	10.0%
		Global Listed Infrastructure	0.0%	10.0%
✓	✓	Direct Infrastructure	0.0%	20.0%
✓		Private Equity	0.0%	5.0%
✓	✓	Farmlands	0.0%	5.0%
✓	✓	Timberlands	0.0%	5.0%
		Total Alternatives	**0.0%**	**30.0%**
		Total Inflation Sensitive Asset Classes	**15.0%**	**30.0%**
		Total Illiquid Asset Classes	**0.0%**	**25.0%**

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Asset Only Optimization 2 - Increased Mortgages & Canadian Equities

Illiquid	Inflation Sensitive	Asset Class	Minimum	Maximum
		MPI Current Fixed Income Portfolio	**55.0%**	**75.0%**
✓		Mortgages	0.0%	10.0%
		Global Bonds	0.0%	5.0%
		High Yield Bonds	0.0%	5.0%
		Bank Loans	0.0%	5.0%
		Emerging Market Debt	0.0%	5.0%
		Total Growth Component Fixed Income	**0.0%**	**10.0%**
		Canadian Equities	0.0%	20.0%
		Canadian Equities, Low Vol	0.0%	20.0%
		Total Canadian Large Cap & Low Vol Equities ***(as % of Total Equities)***	33.3%	100.0%
		Canadian Equities, Small Cap *(as % of other Canadian Equities)*	0.0%	33.3%
		U.S. Equities	0.0%	20.0%
		U.S. Equities, Low Vol	0.0%	20.0%
		U.S. Equities, Small Cap *(as % of other U.S. Equities)*	0.0%	33.3%
		International Equities	0.0%	20.0%
		International Equities, Low Vol	0.0%	20.0%
		International Equities, Small Cap *(as % of other International Equities)*	0.0%	33.3%
		Emerging Markets Equities	0.0%	10.0%
		Emerging Markets Equities, Low Vol	0.0%	10.0%
		Total Emerging Market Equities *(as % of Large Cap & Low Vol Foreign Equities)*	**0.0%**	**50.0%**
		Total Equities	**5.0%**	**30.0%**
	✓	Commodities	0.0%	5.0%
✓	✓	Canadian Direct Real Estate	5.0%	20.0%
✓	✓	U.S. Real Estate	0.0%	20.0%
		Global REITS	0.0%	10.0%
		Global Listed Infrastructure	0.0%	10.0%
✓	✓	Direct Infrastructure	0.0%	20.0%
✓		Private Equity	0.0%	5.0%
✓	✓	Farmlands	0.0%	5.0%
✓	✓	Timberlands	0.0%	5.0%
		Total Alternatives	**0.0%**	**30.0%**
		Total Inflation Sensitive Asset Classes	**15.0%**	**30.0%**
		Total Illiquid Asset Classes	**0.0%**	**25.0%**

January 6, 2015

BY E-MAIL

PRIVATE & CONFIDENTIAL

The Manitoba Public Insurance Corporation
234 Donald St Suite 912
Winnipeg, MB R3C 4A4

Subject: 2014 Asset Liability Study – Section 2.05 (l) and (m)

Background

This document is Aon Hewitt's review of the Manitoba Public Insurance Corporation (MPI) Investment Fund's (the Fund) withdrawal policy and Investment Policy Statement (IPS) pursuant to Sections 2.05 (l) and (m) of the June 13, 2014 Agreement for Services (the Agreement) between MPI and Aon Hewitt Inc.

Section 2.05 (l) of the Agreement required Aon Hewitt to recommend how MPI should handle withdrawals from the Fund.

Section 2.05 (m) of the Agreement required Aon Hewitt to:

> *"identify any areas where the IPS is not consistent with current best practices and provide recommendations to improve the IPS."*

This document details areas Aon Hewitt identified for potential improvements or clarifications within the IPS. We also provide a draft withdrawal policy for consideration based on the principles discussed during earlier study sessions. We first address the IPS and then the withdrawal policy.

IPS Review

Our review is structured by addressing sections in the order in which they appear in the IPS document.

Overall Comments

As noted during earlier asset liability study discussions, the comingling of assets backing pension obligations and assets backing insurance claims is not an industry best practice. The federal Pension and Benefits Standards Regulations note in Section 6 and Section 7 that pension assets are to be invested, recorded and registered in a name that "…clearly indicates that the investment is held in trust for the plan…'. Sections 28(1) and Sections 28(3) of the Manitoba Pension and Benefits Act note pension assets are to be used solely for authorized uses; however it does not require them to be kept separate from other assets. Given the unique nature of the MPI Fund, neither of the above

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regulations are directly applicable. However, in practice, it is well established within the industry that pension assets should be held separately from other assets. This provides for greater ease of record keeping, greater transparency and greater assurance that pension assets are available and used for authorized purposes only.

Aon Hewitt encourages MPI to consider the possibility of, and the process required to, transfer pension assets into a separate investment fund.

General Policy Statement
The fourth paragraph on page four of the IPS contains a definition of the minimum acceptable level of risk that reads:

> *"The minimum acceptable level of risk for the Corporation occurs when its assets have been sufficiently diversified so as to effectively eliminate unsystematic risk."*

This statement should likely be amended given the current asset liability study. The primary objective of the study is to understand, manage and reduce Fund risks relative to liabilities. Fixed income assets represent the best (although not perfect) match for liabilities. As such, risk is broader than unsystematic risk and includes the degree to which MPI invests in non-matching assets. We recommend MPI revise the paragraph to provide a broader perspective of risk.

Statement of Investment Beliefs
Further to the comment on risk immediately above, point vi. in this section references management of risk through matching size and duration of investments relative to liabilities. This underscores the need for a change to how risk is addressed in the General Policy Statement.

There is no belief around investment in MUSH which at target weight makes up 20% of the Fund. MPI may wish to consider a belief addressing MUSH. Sample wording MPI may wish to consider for this belief is:

"The Corporation believes investment in MUSH bonds benefits Manitoba residents without degrading the quality and return of the Fund's investment portfolio."

Fixed Income
Paragraph two of this section may require changes depending on the direction taken around active management of credit and/or duration within established ranges.

Section I – Overview
Section 1.2 – There is no mention of the Pension Plan which is discussed in the Overall Comments above.

Section III – Conflict of Interest

Section 3.3 – There is a reference to "his" on the fourth line of the paragraph. Depending on MPI's policies, gender neutral wording may be more appropriate.

Section 3.5 – The OSFI guidelines for developing investment policy statements do not directly apply to the Fund however are seen as an industry standard. Among the guidelines is a requirement to prohibit related party transactions, subject to certain conditions. Section 3.5 has a limited prohibition on related party transactions, but may benefit from a revision to make it more comprehensive. Sample wording MPI may wish to consider for this section is:

The Fund may not enter into a transaction with a related party unless:

(a) *The transaction is required for the operation or administration of the Fund and the terms and conditions of the transaction are not less favourable to the Fund than market terms and conditions; or*

(b) *The securities of the related party are acquired through a public exchange, with the exception of 'MUSH' bonds as noted in Section 6.5.*

Related party includes any officer, director or employee of the Corporation. It also includes the investment counsels and their employees, a union representing employees of the Corporation, a spouse or child of the persons named previously, or a corporation that is directly or indirectly controlled by the persons named previously, among others.

Section IV – Liability Characteristics

Section 4.2 – As noted in the Overall Comments, liability references are more specific to insurance without reference to the pension plan. However, Section 4.6 does briefly address the pension liability.

Section V – Investment Objectives

Section 5.2 – Risk in this section is defined, however, the stated definitions do not address risk relative to liabilities. MPI may wish to consider alternate wording for this section that would be more specific on risk measures for matching and non-matching (return seeking) assets.

Section 5.5 and Section 10.5 – These sections address Fund investment objectives for return and risk. Neither section defines the timeframes for which the objectives are to be measured and evaluated. Industry best practices set longer term time frames for investment objectives of four to five years for Investment Counsel or specific asset class objectives, and up to ten years for total fund objectives.

Section 5.5 and Section 10.5 – These sections reference the DEX Indices for all market based fixed income benchmarks. The DEX Indices were a service provided by the TMX Group, most commonly known for running the Toronto Stock Exchange. In 2013, the TMX Group formed a partnership with the FTSE Group (London Stock Exchange) to be a global provider of bond data, indices and analytics.

As part of a re-branding process, all references to 'DEX' were phased out by July 1, 2014 and replaced with 'FTSE TMX'. The naming convention became effective in January 2014. All references to DEX should be replaced with FTSE TMX.

Section 5.5 and Section 10.5 – The benchmark index for the Canadian Real Estate allocation is the ICREIM/IPD Canadian Property Index. In 2014, IPD announced the creation of the IPD Canadian Property Fund Index. The newly created index is comprised of 8 open-end pooled funds. The new index may be a more appropriate benchmark for the Fund's real estate allocation as the Fund's real estate is predominately invested in the Greystone Real Estate Fund, a component of the index.

Section VI – Permitted Investments
Section 6.2 – This section notes that MUSH bonds should not bear any degradation relative to ten year Government of Canada bonds. Municipal bonds bear more risk than Government of Canada bonds and a risk premium would be considered appropriate. However, we recognize the unique nature of MUSH bonds and the intent of investing in them.

Section 6.3 (l) – Investment in infrastructure pooled funds (k) should be deemed a permitted investment category to align with Section 6.9.

Section 6.10 – The purpose of Section 6.10 is unclear given Section 6.11. Perhaps the two sections can be combined.

Section 6.13 – Consider expanding the use of leverage to include infrastructure investments which, like real estate, commonly use leverage in underlying infrastructure investments.

Section 6.14 – The last sentence in this section may be unnecessary given the A (low) rating requirement found in Section 8.6.

Section VII – Asset Allocation
Changes to this section may be required pending decisions made stemming from the Asset Liability Study.

Section VIII – Investment Risk
Section 8.2 – As noted during earlier study discussions, stating MPI's expectations for corporate bonds within the fixed income portfolio would assist the Investment Counsel in meeting Fund objectives. It should be noted that all fixed income related sections must align the role of corporate bonds with the Fund's liability hedging strategy. A separate policy section addressing this issue could be considered with potential wording as follows:

"The corporate bond weight is expected to be within +/- 20% of the corporate bond weight of the blended Marketable Bonds FTSE TMX benchmarks. In the event the above target range for corporate bonds is inappropriate for the prevailing market environment, Investment Counsel is responsible for notifying the Working Group, and recommending an alternate target range."

Section 8.4 – The acceptable duration range relative to liabilities at +/- 1.0 years may require further review as the duration range may include both the liability hedging strategy and any potential value added objectives MPI may assign to the fixed income mandate. If value added is not an objective of the fixed income mandate, then a +/- 0.25 year duration range may be more appropriate.

Section 8.5 – This section references currency exposure for investments outside of Canada. If the Fund holds or allows Investment Counsel to hold Canadian issued foreign pay bonds, they would also bear currency risk and wording could be added to this section to address that.

Section 8.6 – Industry best practice, and the OSFI guidelines, include policies outlining the expected course of action in the event a fixed income security is downgraded below policy limits. A reading of Section 8.6 implies that Investment Counsel is expected to liquidate any securities below the A (low) rating threshold. The section may be improved by providing greater clarity as to the expectations regarding downgrades. Sample wording for the section is as follows:

In the event of a downgrade in the credit rating of a fixed income security by a recognized bond rating agency to below the minimum credit rating Investment Counsel will follow the course of action set out below:

(a) *The Working Group will be notified of the downgrade at the earliest possible opportunity;*

(b) *Within five business days of the downgrade, the Investment Counsel will advise the Working Group in writing of the course of action taken or to be taken by Investment Counsel along with the rationale; and*

(c) *Investment Counsel will provide regular reporting on the status of the asset until such time as it matures, is sold, or is upgraded to a rating consistent with the minimum rating standards.*

Section X – Monitoring

Section 10.6 – A monitoring cycle (continuous, daily, monthly, quarterly, etc.) is not specified. As well, MPI may wish to include a self-reporting compliance requirement by managers, as in some cases, managers have systems to monitor compliance on a real team basis and are able to report exceptions that occur intra-period where a specified monitoring cycle is used.

Withdrawal Policy

Withdrawal policies are an industry best practice and are noted in the OSFI guidelines on developing investment policies. In the case of the Fund, the withdrawal policies should be consistent with the following principles.

- Policy target weights are the key driver of long term performance
- Largest overweights from policy target weights are the primary source for withdrawals
- Illiquid assets are generally excluded from withdrawals
- For normal course withdrawals, set parameters should be followed
- Management judgment is required for large or irregular withdrawals (i.e., when RSR level is above upper target)
- Management requires flexibility to address unique circumstance that may arise
- Withdrawals of corporate funds, without affecting pension plan assets, are permissible to fund corporate operations

We provide the following draft withdrawal policy wording for MPI's consideration:

In order to support the financial health of the Fund, ensure necessary liquidity levels are maintained and adequate diversification by asset class and by manager is adhered to, the Corporation has established the following guidelines for cash withdrawals.

Cash management is the responsibility of the Working Group, and any withdrawals shall be reported to the Board quarterly. Withdrawals of corporate funds, without affecting pension plan assets, are permissible to fund corporate operations.

The cash withdrawal guidelines are intended to assist in managing the Fund and maintaining adherence to the target policy weights, to the extent possible. Cash withdrawals will not be used as a method to reward or express dissatisfaction with Investment Counsel performance. Investment Counsel performance is a long-term measure and will be dealt with during performance reviews.

The dollar amount of each withdrawal will be calculated by the Working Group, which shall exercise judgment in withdrawing cash based on the following factors:

- *deviation within the fixed income portfolio from amount necessary to fully hedge liabilities;*
- *deviation from target weights and ranges for each asset class;*
- *deviation from target weights and ranges for each manager;*

- *withdrawals from each asset class/ manager will be in order of greatest variance from the target, until the withdrawal amount is satisfied;*
- *availability of liquidity within the portfolio;*
- *current market conditions; and*
- *future Fund strategies, and Corporation needs.*

In order to reduce cost, the number of asset classes/ managers involved in the transaction should be the fewest possible to raise the necessary amount. Illiquid asset classes such as real estate, infrastructure and private equity are generally exempt from normal course withdrawals.

The Working Group is required to advise the Board of any exceptions to this policy and state the reason for the exception.

We look forward to discussing our submissions for Section 2.05 (l) and (m) of the Agreement for Services at your convenience.

Sincerely,

Aon Hewitt

John A.H. Myrah CA, CFA

JAHM:as

Cc: Julianna Spiropoulos
Jeffrey King

PUB (MPI) 1-51

Volume:	II	Page No.:	INV, Attachment B
Topic:	Investment Income		
Sub Topic:			
Issue:	Asset Liability Management Study		

Question:

Please file the engagement letter for the AON assignment as a document to this proceeding.

Rationale for Question:

To understand the process related to the review of the report by the Corporation.

RESPONSE:

A response to this question is not required. Please see below.

RATIONALE FOR REFUSAL TO FULLY ANSWER THE QUESTION:

As per Board Order 98/14, page 112, a response to this question is not required. The Corporation is not required to produce operational information relating to the engagement of consultants and the related engagement letters [2015 GRA CAC (MPI) 1-55 (c)].

PUB (MPI) 1-52

Volume:	**II**	**Page No.:**	**INV, Attachment B**
Topic:	**Investment Income**		
Sub Topic:			
Issue:	**Asset Liability Management Study**		

Question:

Please indicate when MPI received the Phase I report from AON Hewitt, including date of any presentations.

Rationale for Question:

To understand the process related to the review of the report by the Corporation.

RESPONSE:

Aon Hewitt presented the Phase 1 draft report to the ICWG on September 15, 2014. The Investment Committee and Board of Directors received an update on the Phase 1 report on October 2, 2014. The final draft of the Phase 1 report was received by the Investment Committee Working Group on October 6, 2014. The Phase 1 report was discussed when the Phase 2 report was presented to the Investment Committee and Board of Directors on January 16, 2015.

PUB (MPI) 1-53

Volume:	II	Page No.:	INV, Attachment B
Topic:	Investment Income		
Sub Topic:			
Issue:	Asset Liability Management Study		

Preamble: AON states MPI's current situation (target to break even, premium rate stability objective and small level of reserves allowed) suggest a tighter hedging strategy than duration matching.

Question:

a) Please explain and quantify the rebalancing cost for moving to cash flow matching.

b) Please elaborate on the difficulties in finding longer bond maturities to implement cash flow matching.

c) Please explain how the use of bucketing would address long term liability matching.

Rationale for Question:

To understand the implications for revenue requirement of implementing an alternative interest rate mitigation strategy.

RESPONSE:

a) Cash flow matching requires holding bonds that provide income streams that closely match projected cash outflows required by claims. Projections of the quantum and timing of cash flows related to claims are highly uncertain and when the projections change the investment portfolio must also be changed in order to maintain the matching strategy. Also, the current duration matching strategy matches the duration of the total claims liabilities to the duration of the total fixed income portfolio. Significant changes to the fixed income portfolio would be required in order to transition from a duration matching strategy to a cash flow matching strategy.

Aon Hewitt was hired to review the Corporation's assets and liabilities and to recommend an appropriate risk management strategy. The Corporation reviewed Aon Hewitt's analysis and recommendations and relied upon it in making its decision to continue with a duration matching strategy. Given that Aon Hewitt did not recommend a cash flow matching strategy no analysis was conducted by the Corporation to quantify the rebalancing cost for moving to cash flow matching.

b) The Corporation has liability streams that are forecasted well past 30 years. The market for bonds with maturities longer than 30 years ("ultra-long bonds") is very illiquid and the bonds that are available trade at a premium to bonds with a shorter term (ie: the yields are lower). So, while ultra-long bonds are available, they are relatively expensive.

c) Bucketing involves segmenting the claims liabilities into discrete groups and creating a unique fixed income portfolio to match the duration of each "bucket" of liabilities. Buckets are created for each part of the liability distribution, including long-term liabilities. The more buckets used the more precise the matching strategy.

PUB (MPI) 1-54

Volume:	**II**	**Page No.:**	**INV, Attachment C, Page 16**
Topic:	**Investment Income**		
Sub Topic:			
Issue:	**Asset Liability Management Study**		

Question:

a) Please provide in dollar terms the actual / base case representation of the portfolio with the proposed dollar allocations for 2014/15.

b) Please provide the target dollar allocations proposed by AON with the forecast portfolio allocations for 2015/16.

Rationale for Question:

To understand the implementation of ALM recommendations.

RESPONSE:

a) The table below provides the information requested in part (a) and (b).

b) See the table below.

	Actual Allocation (*)	AON's Base Case Allocation (**)	AON's Proposed Allocation (**)	Forecasted Allocation (***)
Allocation (%)				
Fixed Income	**66.8**	**60.0**	**70.0**	**67.4**
Bucket Approach	0.0	60.0	0.0	0.0
Duration Matching	66.8	0.0	70.0	67.4
Equities	**20.1**	**20.0**	**15.0**	**19.6**
Canadian Equities	13.4	15.0	10.0	13.0
U.S. Equities	6.7	5.0	5.0	6.6
Alternatives	**12.1**	**20.0**	**15.0**	**12.9**
Canadian Real Estate	9.9	13.0	10.0	9.7
Infrastructure	2.2	7.0	5.0	3.2
Dollar Amounts (in million $)				
Fixed Income	**1,732.4**	**1,556.6**	**1,816.1**	**1,765.1**
Equities	**521.4**	**518.9**	**518.9**	**513.3**
Canadian Equities	347.6	389.2	389.2	339.5
U.S. Equities	173.8	129.7	129.7	173.8
Alternatives	**311.9**	**518.9**	**389.2**	**334.6**
Canadian Real Estate	255.9	337.3	259.4	253.7
Infrastructure	56.0	181.6	129.7	80.9

(*) As of February 28, 2015
(**) 2014/2015 Fiscal Year
(***) Average allocation of quarter-end balances for 2015/16 Fiscal Year

PUB (MPI) 1-55

Volume:	II	Page No.:	INV, Attachment C, Page 41
Topic:	Investment Income		
Sub Topic:			
Issue:	Asset Liability Management Study		

Question:

Please indicate to what extent MPI is implementing 15% to 30% inflation sensitive assets.

Rationale for Question:

To understand changes in the composition of the investment portfolio and the impact on returns.

RESPONSE:

As per Vol II Attachment A Investment Policy Statement Section 7.1, the target allocation to alternative investments, which includes real estate and infrastructure, is 15%. These asset classes have the highest sensitivity to inflation within the Corporation's investment portfolio.

PUB (MPI) 1-56

Volume:	**II**	**Page No.:**	**INV, Attachment G**
Topic:	**Investment Income**		
Sub Topic:			
Issue:	**Unrealized Gains**		

Question:

a) Please provide an update of the unrealized gains at the end of the first fiscal quarter.

b) Please explain what factors would trigger a review by the Investment Committee Working Group to assess whether gains should be realized in accordance with the Investment Policy Statement.

Rationale for Question:

To understand whether there has been a material change from the $105.6 million in unrealized gains on the Canadian & US portfolio.

RESPONSE:

a) Please refer to Vol III AI.06 Part 1, Corporate Quarterly Financial Report - 1st Quarter for the Three months ended May 31, 2015, page 15.

b) The ICWG has not directed the realization of gains since 2007. Gains will be realized when the portfolio requires rebalancing as per the operational Rebalancing policy; when changes to the investment strategy are implemented, as when the ICWG changed the U.S. equity investment manager when the previous investment manager discontinued distributing dividends; or when equity managers are terminated for not meeting expectations as per the termination policy. Otherwise, equity gains and losses are realized based on the actions of the investment managers contracted by the Province's Department of Finance.

PUB (MPI) 1-57

Volume:	**II**	**Page No.:**	**INV Attachment B, Pages 9-13**
Topic:	**Asset Liability Management Study**		
Sub Topic:	**Duration Matching, Cash Flow Matching, and Hybrid Solutions**		
Issue:	**Asset Liability Management Study**		

Preamble: [INV.1.3, Page 13] "The ALM Study has been completed and as a result in this year's rate application the fixed income portfolio is forecasted to be fully matched to the Corporate claims liability duration."

Question:

Please provide detailed rationale for the Corporation's decision to adopt Duration Matching rather than a Hybrid Solution in response to the AON recommendation to "implement a tighter hedging strategy".

Rationale for Question:

To gain a better understanding of the Corporation's interpretation of the ALM Study.

RESPONSE:

The rationale is explained in Vol II Investment Income Attachment C: ALM Study Phase 2 page 15 and Aon Hewitt's Part II report – Phase A page 54. The Corporation found the AON rationale compelling in this regard. On that basis the Corporation adopted the Duration Matching approach.

PUB (MPI) 1-58

Volume:	**II**	**Page No.:**	**INV.1.3.2, Page 15**
Topic:	**Asset Liability Management Study**		
Sub Topic:	**Impact of Interest Rates on Basic**		
Issue:	**Asset Liability Management Study**		

Question:

By reference to Table 1.3.2.1, please discuss the reasons for, and implications of, the observation that the Post-ALM forecasts for Gain (Loss) on Marketable Bonds and Gain (Loss) on Claims Liabilities are more interest rate sensitive than the Pre-ALM forecasts when considered separately, but are less interest rate sensitive when considered combined.

Rationale for Question:

To better understand the consequences of the changes made in response to the AON ALM Study.

RESPONSE:

Marketable Bonds

The Post-ALM scenario marketable bond portfolio is more sensitive to interest rate changes than the Pre-ALM scenario for two reasons:

- First, the Post-ALM scenario has an increased allocation to the fixed income portfolio because of the dollar matching of the fixed income portfolio to the claims liabilities on an annual basis. This dollar matching mechanism is discussed further in INV.10.2, Section 1. Duration and Dollar Matching.

- Second, the duration of the fixed income bond portfolio was significantly higher compared to the Pre-ALM scenario (9.5 years duration compared to 7.9 years on average during the rating years).

Claims

The interest rate sensitivity of claims liabilities is primarily driven by the increase in the claims discount rate. The claims discount rate increased by 0.11% more in the Post-ALM scenario compared to the Pre-ALM scenario over the two rating years (1.14% total increase vs. a 1.03% increase).

- This higher claims discount rate in the Post-ALM scenario can be attributed to a higher forecasted marketable bond yield.

- The marketable bond yield is higher in the Post-ALM scenario because higher duration bonds are purchased to increase the fixed income duration to match the claims liability duration. Higher duration bonds are forecasted to have a higher yield. This assumption of the duration yield spread over the Government of Canada 10-year bond forecast is discussed further in INV.3.3.1.3 Marketable Bond Yield.

Combined Basis

On a combined basis, net income is less sensitive to interest rate changes in the Post-ALM scenario because the fixed income and claims liabilities are assumed to be fully duration matched. Also, the fixed income portfolio is forecasted to be dollar matched to Corporate claims liabilities on an annual basis, which further reduces interest rate sensitivity in this scenario. Contrast this to the Pre-ALM scenario, where there is a negative duration gap of -1.0 years and the fixed income dollar allocation is lower than the claims liabilities. These two factors increased the Corporation's interest rate sensitivity in the Pre-ALM scenario.

PUB (MPI) 1-59

Volume:	III	Page No.:	AI.7 Report - Feb 2015
Topic:	Valuation of Policy Liabilities		
Sub Topic:			
Issue:	Claims Forecasting		

Preamble: MFR.44

Question:

a) For all selected regressions from the February 2015 appointed actuary's report on the valuation of the policy liabilities, please provide a graphical representation, including display of actual data and fitted and selected trend lines, accompanied by the customary regression diagnostics.

b) Please provide a comparison by coverage between the assumed loss trends from the February 2015 appointed actuary's report on the valuation of the policy liabilities vs. the assumed loss trends from the Claims Incurred Forecast (Volume 2 CI), including commentary on any significant differences.

Rationale for Question:

To assess reasonableness of valuation assumptions and consistency with pricing assumptions.

RESPONSE:

a) Refer to Vol III AI.7, Regression Analysis.

b) Refer to the table below.

Coverage	Assumed Trend – Actuary's Report	2016/17 Ultimate Growth – Volume II CI
Income Replacement Indemnity	0.00%	0.34%
Accident Benefits – Other (Indexed)	1.00%	1.67%
Accident Benefits – Other (Non-Indexed)	2.50%	1.15%
Bodily Injury	0.00%	1.48%
Collision	5.75%	6.38%
Comprehensive	4.25%	3.30%
Property Damage	3.50%	3.06%

For the most part the two sets of loss trends are relatively close, even though no consistency is required between them. The 2016/17 ultimate growth, calculated from the figures in Vol II, Claims Incurred, is projected future growth based on a thorough analysis of the future environment in which the Corporation will operate. The assumed loss trends, presented in Volume III, AI.7, Actuarial Report as of February 28, 2015, reflect the loss trends in actual prior years' losses.

PUB (MPI) 1-60

Volume:	III	Page No.:	AI.6
Topic:	Financial Statement		
Sub Topic:			
Issue:	Audited Corporate Financial Statement		

Preamble: MPI has filed a condensed version of its Annual Report with the Application.

Question:

Please file a link to the Audited Corporate Financial Statement.

Rationale for Question:

To understand the full financial disclosure related to MPI's 2014/15 financial results.

RESPONSE:

http://www.mpi.mb.ca/en/Newsroom/Pages/annualreports.aspx

PUB (MPI) 1-61

Volume:	III	Page No.:	AI.9, Page 7
Topic:	Actuarial Standards Compliance		
Sub Topic:	0% Profit Provision		
Issue:	Alternate Rate Indications Based on Accepted Actuarial Practice in Canada		

Question:

a) Please confirm that the 0% profit provision included in the indicated rates in accordance with accepted actuarial practice in Canada does not recognize the revenue contribution arising from the investment return on the assets supporting Basic Total Equity.

b) Please provide a restated version of the "Major Classification – Required Rate Changes" derivation exhibit which includes a profit provision that recognizes as a premium offset the contribution of the expected investment return on the assets supporting Basic Total Equity.

Rationale for Question:

To assess consistency with the break-even objective.

RESPONSE:

a) Confirmed.

b) The table below presents the derivation of the expected investment return on the assets supporting Basic Total Equity. The inclusion of the average investment income from equity of $12.7 million will result in a rate decrease of approximately 1.4% i.e. the required overall rate increase would be 3.0% instead of 4.4%.

(All figures in $000)			
		2015/16	**2016/17**
Total Liabilities excl 'Unearned Premium and Fees' and 'Provision for Unpaid Claims'	Vol II Pro Formas, pg 4	347,017	362,940
Total Equity	Vol II Pro Formas, pg 4	233,246	227,413
		2016/17	**2017/18**
Investment Income excl such from the fixed income portfolio [a, b]	Vol II Investment Income, pg 5	31,474	33,191
Investment Income from Equity [c]		12,651	12,786
Average Investment Income from Equity			12,719

Notes:
[a] Investment income is assumed to be earned on the assets as at the end of the fiscal year.
[b] Excludes interest income or gains/losses from cash/short term investments, marketable bonds and MUSH; Basic's portion is 83.45%.
[c] Total Equity / [Total Liabilities + Total Equity] * Investment Income