MANITOBA PUBLIC INSURANCE

Round 2 Information Requests

2017 GRA

September 14, 2016

Public Utilities Board

Bike Winnipeg

Consumers' Association of Canada (Manitoba)

Coalition of Manitoba Motorcycles Groups

PUB (MPI)

PUB (MPI) 2-1

Volume:	PUB (MPI) 1-3(c) III	Page No.:	AI.9, Page 1
Topic:	Ratemaking in Accordance with Accepted Actuarial Practice in Canada		
Sub Topic:	0% Profit Provision		
Issue:	Consistency with Break-Even Objective		

Preamble:

The estimate for Average Investment Income from Equity has declined by over 20%, from $12.7 million provided last year to $10.0 million provided this year.

Question:

Please provide a comparative schedule showing the composition of the amounts shown for "Investment Income excl such from the fixed income portfolio" in this response vs. those shown in the corresponding response last year (2016 GRA PUB (MPI) 1-61(b)), with accompanying commentary on significant differences.

Rationale for Question:

To assess consistency with the break-even objective.

RESPONSE:

The table on the next page shows the derivation of the "Investment Income Excluding such from the Fixed Income Portfolio" for Basic as presented in *PUB (MPI) 1-3(c)* in the 2017 General Rate Application (GRA) and *PUB (MPI) 1-61(b)* in the 2016 GRA.

Forecasted realized gains during the rating years (2017/18 and 2018/19) are on average $7.7 million lower compared to last year's forecast. This reduction in realized gains was caused by a decline in equity markets in 2015/16. To illustrate this market decline, the S&P TSX index fell by 12.9% in 2015/16.

The 2015/16 decline in equity markets lowered the beginning market value of the equity portfolio, which reduced the amount of equity gains available to be realized in the 2017 GRA. Unrealized gains for Canadian and U.S. equities as of February 29, 2016 was $73.1 million, which was $32.6 million lower than the $105.7 million in unrealized gains as of February 28, 2015.

	2017 GRA			2016 GRA			Difference
	2017/18	2018/19	Average	2016/17	2017/18	Average	Average
Equity Dividends							
Canadian Equities	9,258	10,630	9,944	10,199	10,935	10,567	-623
US Equities	4,965	5,550	5,258	4,378	4,612	4,495	763
Total	**14,223**	**16,180**	**15,202**	**14,577**	**15,547**	**15,062**	**140**
Equity Gains During Period							
Canadian Equities Realized Gains	8,112	6,775	7,444	14,350	14,159	14,255	-6,811
US Equities Realized Gains	2,704	0	1,352	2,894	3,935	3,415	-2,063
Total	**10,816**	**6,775**	**8,796**	**17,244**	**18,094**	**17,669**	**-8,874**
Alternative Investment Income							
Investment Properties (CityPlace)	2,149	4,952	3,551	4,190	3,748	3,969	-419
Real Estate (Pooled Fund)	14,271	14,667	14,469	13,538	13,705	13,622	848
Infrastructure	8,461	8,992	8,727	8,098	9,515	8,807	-80
Total	**24,881**	**28,611**	**26,746**	**25,826**	**26,968**	**26,397**	**349**
Other							
Investment Fees Paid	-4,620	-4,733	-4,677	-4,855	-4,975	-4,915	239
Pension Expense	-15,071	-15,763	-15,417	-15,077	-15,859	-15,468	51
Total	**-19,691**	**-20,496**	**-20,094**	**-19,932**	**-20,834**	**-20,383**	**290**
Corporate Investment Income Excl Fixed Income Portfolio	30,229	31,070	30,650	37,715	39,775	38,745	-8,095
Basic Allocation	84.8%	83.9%	84.4%	83.5%	83.5%	83.5%	0.9%
Investment Income Excl Fixed Income Portfolio - Basic	25,633	26,068	25,851	33,172	29,695	31,434	-5,583

PUB (MPI) 2-2

Volume:	PUB (MPI) 1-4 III	Page No.:	AI.9
Topic:	Ratemaking in Accordance with Accepted Actuarial Practice in Canada		
Sub Topic:	Continuation of Collaborative Process		
Issue:			

Question:

With respect to each methodological/assumption area discussed in this response in which the Corporation sees potential merit, please provide comparative estimates of the impact of the change on the rate level indication, both individually and collectively, with supporting documentation.

Rationale for Question:

To continue the collaborative process.

RESPONSE:

In the response to PUB (MPI) 1-4, there were two sections whereby "*MPI agrees that the suggested approach has merit*". The following discusses the potential impact on the rate indication if the suggested approaches are implemented.

Discount Rate

Currently, per *Volume III AI.9 Actuarial Standards*, the rate indication is determined by discounting all cash flows based on an assumed interest rate of 3.79%. This interest rate reflects the "*duration weighted interest rate of the Corporation's fixed income as at March 1, 2017*", and is based on a portfolio duration of 9.9 years.
If the suggested approach was implemented, the interest rate would have to be adjusted downwards to reflect a portfolio duration of 3.0 years. The following table presents the rate indications at different assumed interest rates.

Interest Rate	Indicated Rate Change
3.79%*	4.78%
2.50%	7.47%
2.25%	8.06%
2.00%	8.68%
1.75%	9.33%
1.50%	10.01%

**Interest rate used in the 2017 GRA*

Profit Provision

Per *PUB (MPI) 1-4*, the Public Utilities Board's (PUB) actuarial advisor proposed that the "profit" provision be derived as –IR / PSR whereby IR represents the expected before-tax investment return rate on assets supporting Basic Total Equity and PSR represents the expected (i.e. normal) premium-to-surplus ratio. Per the response to *PUB (MPI) 1-3*, IR can be calculated as 10,044 / [(217,128 + 220,488) / 2] = 4.59%. The Corporation currently operates at a fairly high premium-to-surplus ratio of approximately 4.0. As such, the "profit" provision can be calculated as -4.59% / 4.0 = -1.15%.

Based on the assumption of a profit provision of -1.15%, the indicated rate change would decrease from 4.78% to 3.51% i.e. a decrease of 1.27%.

The following table presents the rate indications at different assumed interest rates with a profit provision of -1.15%.

Interest Rate	Indicated Rate Change
3.79%*	3.51%
2.50%	6.17%
2.25%	6.75%
2.00%	7.36%
1.75%	8.00%
1.50%	8.67%

**Interest rate used in the 2017 GRA*

PUB (MPI) 2-3

Volume:	PUB/MPI I-7, CAC/MPI I-58	Page No.:	
Topic:	Cost Containment		
Sub Topic:			
Issue:	Expense Variances		

Question:

a) Please provide the terms of reference and executive summary for the Finance Division Review, the Business Development & Communications Organizational Review and Customer Service Organizational Review from Deloitte Management Services.

b) Please indicate to what extent these costs will be incurred by Basic.

Rationale for Question:

To understand the nature of operating expense variances.

RESPONSE:

a) The stated rationale for the question is:

"To understand the nature of operating expense variances."

These reports are not an evaluation of "operating expense variances", nor do they otherwise provide any information that would quantify or explain the reasons for operating expense variances. The reports were prepared for management to assist in the assessment of organizational structure and to identify potential improvements to organization design. Management is still assessing the reports and has not finalized all decisions to act. Details of the reports which identify potential organizational structure changes are not relevant to the approval of rates that are being applied for, particularly since management has not made final decisions related to the observations and recommendations contained in the reports. The reports also contain information that may affect staff, and is thus being treated as sensitive.

b) Please refer to *Volume II EXP Appendices Appendix 6 page 14*. The costs of these reviews were recorded to Special Services, the approximate basic percentage for these costs are 80.4% for normal operations, 93.4% for initiatives for an average total basic percentage of 81.0%.

PUB (MPI) 2-4

Volume:	PUB/MPI 1-8(b)	Page No.:	
Topic:	Cost Containment		
Sub Topic:			
Issue:	Operating Expenses		

Question:

Please provide the details of the "out of scope" post-retirement benefits.

Rationale for Question:

To understand changes in operating costs.

RESPONSE:

Out-of-scope Benefits include various coverage levels for:

- Dental
- Hospital/Ambulance
- Vision Care
- Prescription Drugs
- Extended Health Care including:
  - private duty nursing
  - cardiac rehabilitation
  - prosthetic appliances
  - rental/purchase of durable medical equipment
  - paramedical practitioners, physiotherapy, podiatry and clinical psychology
  - accidental dental treatment

The total cost of the out-of-scope post retirement benefits also includes an actuarial component which is not budgeted for. The 2015-16 actuarial adjustment was $438,000.

PUB (MPI) 2-5

Volume:	PUB/MPI 1-12	Page No.:	
Topic:	Interest Rate Forecast Risk Factor		
Sub Topic:			
Issue:	Interest Rate Risk		

Question:

a) Please explain why the Corporation does not, by practice, early adopt accounting practices for rate setting purposes if allowed under applicable standards.

b) Please describe any barriers to the early adoption of these accounting practices.

c) Rate increases are sought based on net income, not total comprehensive income. How would the indicated rate change for 2017/18 be effected if it was based on net income, adjusted for the early adoption of the new standards?

Rationale for Question:

To understand options relative to the Corporation's exposure to interest rate risk and interest rate forecasting risk.

RESPONSE:

a) Manitoba Public Insurance (MPI) does not by practice early adopt accounting standards to allow for industry knowledge and practical application to be developed through actual application of the standards.

   One of the two accounting standards in question is still in draft form, asking for the impact of a draft standard is a theoretical activity that will not conclusively determine the impact of the standard on MPI's results.

   In addition, while early adoption is permitted under *(Volume III AI.8) IFRS 9*, Office of the Superintendent of Financial Institutions (OSFI) has indicated that early adoption is not allowed. While the Corporation is not federally regulated, it generally follows OSFI's guidance in such matters.

b) Please see response to a).

c) *(Volume III AI.8) IFRS 4* is not anticipated to have implementation prior to 2019 therefore the Corporation will not be required to implement changes for its financial statements before the February 29, 2020 fiscal year. This means that even if the Corporation were to consider early adoption (which in practice is not done), there would be no impact to the 2017/18 fiscal year and net income.

   (Volume III AI.8) IFRS 9 is effective for annual periods beginning on or after January 1, 2018; however, the IASB has proposed temporary deferral and overlay approaches for insurers. Applying one standard in isolation will not appropriately reflect interest rate impacts on the financial statements of the Corporation. The proposed changes would allow reporting entities, where the liabilities are predominantly arising from insurance contracts, to defer IFRS 9 until the new insurance contract standard is issued or 2021 at the latest. Given the proposed timing of IFRS 4, again the 2017/18 fiscal year will not be impacted even with early adoption.

   Please refer to *Volume III AI.8 IFRS* for discussion on implementation dates.

PUB (MPI) 2-6

Volume:	PUB/MPI 1-15(b)	Page No.:	
Topic:			
Sub Topic:			
Issue:	Interest Rate Forecast		

Question:

Please provide any commentary by Global Insight specifically related to each of its March 2016 and July 2016 forecasts, which assume flat interest rates beyond 2018, Q4 and 2019 Q3 respectively.

RESPONSE:

Please see *PUB (MPI) 1-15* for the Global Insight commentary related to the March 2016 forecast.

The following paragraph below is the relevant excerpt of the ***August 2016 Canadian Forecast Economic Summary*** from Global Insight regarding interest rates.

> "In terms of monetary policy the Bank of Canada left the overnight rate at 0.5% last month. The Bank did lower its growth expectations for this year by 0.4 percentage point and for 2017 by 0.1 percentage point. However, it raised the growth outlook for 2018 by 0.1 percentage point. The Bank's real GDP growth forecast of 1.3% this year, 2.2% in 2017, and 2.1% in 2018 is now more closely aligned with our forecast. As expected, the Bank views the wildfires as temporary and estimated the impact on the economy would be about a 1% hit in the second quarter. This is larger than what Statistics Canada estimated, but the data are still subject to revisions. According to the Bank, this temporary downturn will not last as foreign demand and stronger US growth in the second half of the year are expected to boost Canada's growth, as well as employment, which has been

stagnant lately. In addition, the unemployment rate is falling as people continue to leave the labour force. Therefore, all is not great with the Canadian economy, but it will improve. Given that the economic headwinds are deemed temporary there is no need to shift monetary policy gears. We still have the Bank of Canada remaining on the sidelines until the end of next year, with the first hike in October. Very similar to the US Federal Reserve, the Bank will gradually increase rates to a long-term average of 3.00% by early 2019."

PUB (MPI) 2-7

Volume:	**PUB/MPI I-16**	**Page No.:**	
Topic:	**Interest Rate Forecasting**		
Sub Topic:			
Issue:			

Preamble: The Corporation has indicated that its standard interest rate forecast is not a best estimate.

Question:

a) Please provide two schedules of forecasted interest rates based on the following considerations taken together:

i. Use current short and long term interest rate forecasts from the major banks (i.e., not including Global Insight & Conference Board of Canada), and adding Laurentian and National banks if available.

ii. For the banks that provide only annual forecasts, make adjustments (linearly) to generate quarterly values to smooth the transition from one period to the next.

iii. For the banks that do not cover the full forecast period, please extend the forecast on a naïve basis, indicating which periods are affected by this assumption.

iv. Please provide both the simple average and the simple average excluding high value in each quarter.

v. Please provide footnotes indicating the date of each bank forecast and the basis of preparation (i.e., end of period, average of period).

vi. Show X.XX% for those values that cannot be publicly disclosed.

vii. Please provide the bank forecasts, in confidence to the Board only, if necessary.

viii. Please provide any critical commentary that the Corporation and/or Dr. Cleary deem appropriate.

ix. Please provide the estimated percentile level for each of these two interest rate forecast scenarios.

b) Please provide a current update to the Standard Interest Rate Forecast.

c) Please provide updated Pro Formas (PF.1, PF.2, PF.3) based on the two interest rate forecasts provided in (a) above, both before and after the implied rate level change.

d) Please provide an updated Table 1 Summary of Investment Income that reflect each of the Pro Formas in (c) above.

e) Please provide updated Pro Formas (PF.1, PF.2, PF.3) and interest rate forecast summary based on an updated naïve forecast using the bank forecast information from (a) above.

f) Please provide updated Pro Formas (PF.1, PF.2, PF.3) and interest rate forecast summary based on an average of the interest rate forecasts underlying (a) and (e) above.

g) Please provide an updated Scenario Summary Comparison from the response to PUB/MPI 1-16(a) removing Scenarios 2 & 2A, and adding Scenarios 1B, 4 & 4A, 5 and 6 that reflect the results provided in (b), (c), (e) and (f) above respectively.

Rationale for Question:

To explore possible improvements in interest rate forecasting.

RESPONSE:

a) Scenario PUB (MPI) 2-7 (c)1 and (c)2 are the bank-only with long-term forecasts. Please see table below. RBC and BMO's forecasts will be provided in confidence to the Board, and are labeled as X.XX%.

PUB 2-7 (c)1 and (c)2: Bank Only with Long Term Government of Canada 10 Year Bond Yield

	BMO NB	CIBC	RBC	Scotia	TD	Laurentian	National	Average (c)1	Average Exclude Highest (c)2
2016 Q1									
Q2									
Q3	1.05%	1.10%	1.15%	0.80%	1.05%	**1.35%**	1.25%	1.11%	1.07%
Q4	1.12%	1.30%	1.25%	0.90%	1.15%	**1.50%**	1.32%	1.22%	1.17%
2017 Q1	1.18%	1.50%	1.40%	1.00%	1.30%	**1.60%**	1.39%	1.34%	1.30%
Q2	1.23%	1.55%	1.60%	1.05%	1.40%	**1.70%**	1.43%	1.42%	1.38%
Q3	1.30%	1.70%	1.75%	1.20%	1.50%	**1.80%**	1.51%	1.54%	1.49%
Q4	1.37%	1.85%	**1.90%**	1.40%	1.60%	1.85%	1.67%	1.66%	1.62%
2018 Q1	X.XX%	2.01%	X.XX%	1.84%	1.72%		1.74%	1.84%	1.77%
Q2	X.XX%	2.17%	X.XX%	2.28%	1.84%			2.09%	2.02%
Q3	X.XX%	2.33%	X.XX%	2.72%	1.96%			2.32%	2.22%
Q4	X.XX%	2.49%	X.XX%	3.16%	2.08%			2.55%	2.39%
2019 Q1	X.XX%	2.56%	X.XX%	3.22%	2.11%			2.65%	2.51%
Q2	X.XX%	2.62%	X.XX%	3.27%	2.14%			2.76%	2.63%
Q3	X.XX%	2.69%	X.XX%	3.33%	2.16%			2.87%	2.76%
Q4	X.XX%	2.75%	X.XX%	3.38%	2.19%			2.99%	2.87%
2020 Q1		2.85%	X.XX%	3.51%	2.27%			3.07%	2.88%
Q2		2.95%	X.XX%	3.64%	2.36%			3.17%	2.98%
Q3		3.05%	X.XX%	3.76%	2.44%			3.26%	3.08%
Q4		3.15%	X.XX%	3.89%	2.52%			3.35%	3.19%

Numbers in Bold Indicate Highest

Data sources dates:
BMO NB as of August 19, 2016 (Average of Period)
CIBC as of August 11, 2016 (End of Period)
RBC as of August 2016 (End of Period)
Scotiabank as of August 3, 2016 (End of Period)
TD as of July 28, 2016 (End of Period)
Laurentian Bank as of June 10, 2016 (End of Period)
National Bank as of June 24, 2016 (End of Period)

Scenario PUB (MPI) 2-7 (e)1 and (e)2 is short and long term bank-only forecasts with Naïve Extension. Please see table below.

PUB 2-7 (e)1 and (e)2: Bank Only with Long Term, Extended Naïve
Government of Canada 10 Year Bond Yield

	BMO NB	CIBC	RBC	Scotia	TD	Laurentian	National	Average (c)1	Average Exclude Highest (c)2
2016 Q1									
Q2									
Q3	1.05%	1.10%	1.15%	0.80%	1.05%	1.35%	1.25%	1.11%	1.07%
Q4	1.12%	1.30%	1.25%	0.90%	1.15%	1.50%	1.32%	1.22%	1.17%
2017 Q1	1.18%	1.50%	1.40%	1.00%	1.30%	1.60%	1.39%	1.34%	1.30%
Q2	1.23%	1.55%	1.60%	1.05%	1.40%	1.70%	1.43%	1.42%	1.38%
Q3	1.30%	1.70%	1.75%	1.20%	1.50%	1.80%	1.51%	1.54%	1.49%
Q4	1.37%	1.85%	1.90%	1.40%	1.60%	1.85%	1.67%	1.66%	1.62%
2018 Q1	X.XX%	2.01%	X.XX%	1.84%	1.72%	**1.85%**	1.74%	1.84%	1.79%
Q2	X.XX%	2.17%	X.XX%	2.28%	1.84%	**1.85%**	**1.74%**	2.00%	1.95%
Q3	X.XX%	2.33%	X.XX%	2.72%	1.96%	**1.85%**	**1.74%**	2.17%	2.08%
Q4	X.XX%	2.49%	X.XX%	3.16%	2.08%	**1.85%**	**1.74%**	2.33%	2.19%
2019 Q1	X.XX%	2.56%	X.XX%	3.22%	2.11%	**1.85%**	**1.74%**	2.41%	2.27%
Q2	X.XX%	2.62%	X.XX%	3.27%	2.14%	**1.85%**	**1.74%**	2.48%	2.35%
Q3	X.XX%	2.69%	X.XX%	3.33%	2.16%	**1.85%**	**1.74%**	2.56%	2.44%
Q4	X.XX%	2.75%	X.XX%	3.38%	2.19%	**1.85%**	**1.74%**	2.65%	2.51%
2020 Q1	X.XX%	2.85%	X.XX%	3.51%	2.27%	**1.85%**	**1.74%**	2.72%	2.57%
Q2	X.XX%	2.95%	X.XX%	3.64%	2.36%	**1.85%**	**1.74%**	2.78%	2.62%
Q3	X.XX%	3.05%	X.XX%	3.76%	2.44%	**1.85%**	**1.74%**	2.83%	2.67%
Q4	X.XX%	3.15%	X.XX%	3.89%	2.52%	**1.85%**	**1.74%**	2.88%	2.72%

Numbers in Bold Indicate Naïve Forecast

Data sources dates:
BMO NB as of August 19, 2016 (Average of Period)
CIBC as of August 11, 2016 (End of Period)
RBC as of August 2016 (End of Period)
Scotiabank as of August 3, 2016 (End of Period)
TD as of July 28, 2016 (End of Period)
Laurentian Bank as of June 10, 2016 (End of Period)
National Bank as of June 24, 2016 (End of Period)

Commentary:

- Removing the highest interest rate forecast has a small impact on the increase in interest rates over 3 years. The Corporation is not aware of any other institutions that exclude the highest interest rate from their forecast.

- Laurentian Bank and National Bank have a forecast for 2 years. Taking their last published interest rate forecast and carrying it forward (naïve extention) is a potential distortion of Laurentian and National Bank’s internal expectation for long-term interest rate forecasts. All the other banks have a rising interest rate forecast for the last three years of the forecast period.

- The Corporation notes that in the Technical Conference, Dr. Sean Cleary explained how forecasts tend to cluster together, being directionally the same, and often pretty similar. He expanded on the reason for the phenomenon as result of having less reward for being right, and apart from the crowd, than the penalty for being wrong and apart from the crowd. This tends to result in forecasts, be it interest rates, earnings, or foreign currency, that gravitate together. In light of this observation by Dr. Cleary, the Corporation questions the value in scenario analysis which impacts the margins of the Standard Interest Rate Forecast (SIRF). The Corporation and Dr. Cleary have presented evidence that the SIRF is materially flawed, and a not a best estimate. The Corporation respectfully suggests that solution to the risks presented by the SIRF, is a more significant adjustment of a 50/50 weighting between the SIRF and the naïve forecast, as proffered by Dr. Cleary in the Technical Conference, and elaborated on by the Corporation in PUB(MPI)2-25.

- Dr. Cleary concurs.

<u>Percentile Level for 3 year increase:</u>
- Bank Only scenario percentile: 87.1%
- Bank Only, Average excluding highest scenario percentile: 84.8%
- Bank Only, Extended Naïve scenario percentile: 84.5%
- Bank Only, Extended Naïve scenario excluding highest scenario percentile: 83.5%

b) The Standard Interest Rate Forecast as of August 2016 is provide in the table below.

August 2016 Standard Interest Rate Forecast
Government of Canada 10 Year Bond Yield

	BMO NB	*CIBC*	*Global*	*RBC*	*Scotia*	*TD*	*Median*	*Average*
2016 Q1								
Q2								
Q3	1.07%	1.10%	1.30%	1.15%	0.80%	1.05%	1.09%	1.08%
Q4	1.13%	1.30%	1.44%	1.25%	0.90%	1.15%	1.20%	1.20%
2017 Q1	1.18%	1.50%	1.70%	1.40%	1.00%	1.30%	1.35%	1.35%
Q2	1.23%	1.55%	1.85%	1.60%	1.05%	1.40%	1.48%	1.45%
Q3	1.30%	1.70%	2.05%	1.75%	1.20%	1.50%	1.60%	1.58%
Q4	1.37%	1.85%	2.19%	1.90%	1.40%	1.60%	1.73%	1.72%
2018 Q1			2.35%				2.35%	2.35%
Q2			2.45%				2.45%	2.45%
Q3			2.64%				2.64%	2.64%
Q4			2.77%				2.77%	2.77%
2019 Q1			2.91%				2.91%	2.91%
Q2			3.12%				3.12%	3.12%
Q3			3.38%				3.38%	3.38%
Q4			3.45%				3.45%	3.45%
2020 Q1			3.45%				3.45%	3.45%
Q2			3.45%				3.45%	3.45%
Q3			3.45%				3.45%	3.45%
Q4			3.45%				3.45%	3.45%

c) d) e) f) and g)

All of the Pro-Formas for this question are included in Attachment A.

The Summary of Investment Income for each scenario is in Attachment B.

Please see Attachment C for the Scenario Summary.

See the table below for a legend.

PUB (MPI) 2-7 Subquestion:	
(c)1	0% RI - Bank Only with Long Term
(c)2	0% RI - Bank Only, Excluding Highest
(c)3	2% RI - Bank Only with Long Term
(c)4	2% RI - Bank Only, Excluding Highest
(e)1	0% RI - Bank Only, Extended Naïve
(e)2	0% RI - Bank Only, Extended Naïve, Exclude Highest
(e)3	2% RI - Bank Only, Extended Naïve
(e)4	2% RI - Bank Only, Extended Naïve, Exclude Highest
(f)1	0% RI - PUB 2-7 Average of C) and E)
(f)2	2% RI - PUB 2-7 Average of C) and E)

PF.1 STATEMENT OF OPERATIONS

2017 GRA - 0.0% Rate Change - Interest Rate Forecast of Banks only
(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Motor Vehicles	893,420	935,264	977,983	1,023,201	1,070,634
Drivers	50,393	52,908	55,180	57,424	59,626
Reinsurance Ceded	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Written	**932,181**	**976,296**	**1,021,049**	**1,068,269**	**1,117,657**
Net Premiums Earned					
Motor Vehicles	875,348	915,958	958,273	1,002,338	1,048,749
Drivers	48,478	51,645	54,039	56,298	58,521
Reinsurance Ceded	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Earned	**912,194**	**955,727**	**1,000,198**	**1,046,280**	**1,094,667**
Service Fees & Other Revenues	21,557	23,227	24,889	26,846	28,754
Total Earned Revenues	**933,751**	**978,954**	**1,025,087**	**1,073,126**	**1,123,421**
Net Claims Incurred	766,287	806,884	839,145	874,881	914,788
(a) Claims Incurred - Interest Rate Impact	(6,322)	(59,024)	(116,718)	(51,550)	(46,000)
Total Claims Incurred	**759,965**	**747,860**	**722,427**	**823,331**	**868,788**
Claims Expense	125,191	128,699	133,286	140,884	147,881
Road Safety/Loss Prevention	13,318	13,251	14,131	14,106	14,216
Total Claims Costs	**898,474**	**889,810**	**869,844**	**978,321**	**1,030,885**
Expenses					
Operating	76,908	78,242	82,607	83,459	88,117
Commissions	35,616	37,110	38,773	40,494	42,300
Premium Taxes	27,715	29,028	30,369	31,759	33,218
Regulatory/Appeal	3,421	3,494	3,567	3,641	3,718
Total Expenses	**143,660**	**147,874**	**155,316**	**159,353**	**167,353**
Underwriting Income (Loss)	**(108,383)**	**(58,730)**	**(73)**	**(64,548)**	**(74,817)**
Investment Income	79,529	72,772	84,013	84,366	96,301
(b) Investment Income - Interest Rate Impact	(1,969)	(51,773)	(93,964)	(42,295)	(33,325)
Net Investment Income	**77,560**	**20,999**	**(9,951)**	**42,071**	**62,976**
Net Income (Loss) from Operations for Rate Setting	**(31,954)**	**(35,486)**	**(11,205)**	**(25,331)**	**(16,154)**
Add: DPAC / Premium Deficiency adjustment	(1,131)	2,245	(1,181)	(2,854)	(4,313)
Net Income (Loss)	**(30,823)**	**(37,731)**	**(10,024)**	**(22,477)**	**(11,841)**
Total net Impact due to interest rate change (b) - (a)	**4,354**	**7,250**	**22,754**	**9,254**	**12,675**

Manitoba Public Insurance

PF.2 STATEMENT OF FINANCIAL POSITION

2017 GRA - 0.0% Rate Change - Interest Rate Forecast of Banks only
(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Assets					
Cash and cash equivalents	10,771	9,895	11,052	11,873	13,120
Investments	2,202,789	2,198,107	2,154,959	2,170,927	2,213,648
Investment property	40,424	40,852	40,990	41,372	42,326
Accounts receivable	302,393	315,639	328,700	342,506	356,919
Deferred policy acquisition costs	3,272	2,231	4,642	8,796	14,474
Property and equipment	86,248	88,863	90,183	90,345	91,720
Deferred development costs	70,462	77,341	79,991	81,701	64,385
	2,716,359	**2,732,928**	**2,710,517**	**2,747,520**	**2,796,592**
Liabilities					
Due to other insurance companies	113	113	113	113	113
Accounts payable and accrued liabilites	29,447	30,993	31,499	32,418	33,959
Financing lease obligation	2,968	2,899	2,825	2,752	2,678
Unearned premiums and fees	475,671	499,416	523,709	549,429	576,463
Provision for employee current benefits	16,527	16,880	17,244	17,616	17,999
Provision for employee future benefits	286,836	302,414	319,313	336,739	354,910
Provision for unpaid claims	1,704,935	1,714,216	1,661,625	1,669,621	1,679,912
	2,516,497	**2,566,931**	**2,556,328**	**2,608,688**	**2,666,034**
Equity					
Retained earnings	163,674	125,943	115,921	93,444	81,602
Basic Insurance Retained Earnings	-	-	-	-	-
Accumulated Other Comprehensive Income	36,188	40,052	38,267	45,389	48,956
Total Equity	**199,861**	**165,995**	**154,188**	**138,833**	**130,558**
Total Liabilities & Equity	**2,716,358**	**2,732,926**	**2,710,516**	**2,747,521**	**2,796,592**

PF.3 STATEMENT OF CHANGES IN EQUITY

2017 GRA - 0.0% Rate Change - Interest Rate Forecast of Banks only

(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Retained Earnings					
Beginning Balance	194,497	163,674	125,943	115,921	93,444
Net Income (Loss) from annual operations	(30,823)	(37,731)	(10,022)	(22,477)	(11,842)
Premium Rebate	0	0	0	0	0
Transfer (to) / from Non-Basic Retained Earnings	0	0	0	0	0
Total Retained Earnings	**163,674**	**125,943**	**115,921**	**93,444**	**81,602**
Retained Earnings					
Equity Reserve	163,674	125,943	115,921	93,444	81,602
Excess Retained Earnings	0	0	0	0	0
Total Retained Earnings	**163,674**	**125,943**	**115,921**	**93,444**	**81,602**
Total Accumulated Other Comprehensive Income					
Beginning Balance	36,504	36,188	40,052	38,267	45,389
Other Comprehensive Income for the Year	(316)	3,865	(1,785)	7,122	3,567
Total Accumulated Other Comprehensive Income	**36,188**	**40,052**	**38,267**	**45,389**	**48,956**
Total Equity Balance	**199,861**	**165,995**	**154,188**	**138,833**	**130,558**
RESERVE TARGETS					
DCAT Total Equity Target	**231,000**	**181,000**	**181,000**	**181,000**	**181,000**
MCT Total Equity Target	**366,000**	**404,000**	**404,000**	**404,000**	**404,000**

PF.1 STATEMENT OF OPERATIONS

2017 GRA - 0.0% Rate Change - Interest Rate Forecast of Banks Only, Excluding Highest
(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Motor Vehicles	893,420	935,264	977,983	1,023,201	1,070,634
Drivers	50,393	52,908	55,180	57,424	59,626
Reinsurance Ceded	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Written	**932,181**	**976,296**	**1,021,049**	**1,068,269**	**1,117,657**
Net Premiums Earned					
Motor Vehicles	875,348	915,958	958,273	1,002,338	1,048,749
Drivers	48,478	51,645	54,039	56,298	58,521
Reinsurance Ceded	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Earned	**912,194**	**955,727**	**1,000,198**	**1,046,280**	**1,094,667**
Service Fees & Other Revenues	21,557	23,227	24,889	26,846	28,754
Total Earned Revenues	**933,751**	**978,954**	**1,025,087**	**1,073,126**	**1,123,421**
Net Claims Incurred	766,656	807,006	840,060	875,036	915,506
(a) Claims Incurred - Interest Rate Impact	496	(60,551)	(102,621)	(58,999)	(38,407)
Total Claims Incurred	**767,152**	**746,455**	**737,439**	**816,037**	**877,099**
Claims Expense	125,191	128,703	133,289	141,014	147,889
Road Safety/Loss Prevention	13,318	13,251	14,131	14,120	14,216
Total Claims Costs	**905,661**	**888,409**	**884,859**	**971,171**	**1,039,204**
Expenses					
Operating	76,908	78,242	82,607	83,533	88,117
Commissions	35,616	37,110	38,773	40,494	42,300
Premium Taxes	27,715	29,028	30,369	31,759	33,218
Regulatory/Appeal	3,421	3,494	3,567	3,641	3,718
Total Expenses	**143,660**	**147,874**	**155,316**	**159,427**	**167,353**
Underwriting Income (Loss)	**(115,570)**	**(57,329)**	**(15,088)**	**(57,472)**	**(83,136)**
Investment Income	79,438	72,423	82,804	85,862	90,293
(b) Investment Income - Interest Rate Impact	3,803	(53,056)	(83,195)	(47,418)	(29,402)
Net Investment Income	**83,241**	**19,367**	**(391)**	**38,444**	**60,891**
Net Income (Loss) from Operations for Rate Setting	**(33,091)**	**(35,807)**	**(15,899)**	**(22,235)**	**(26,137)**
Add: DPAC / Premium Deficiency adjustment	(762)	2,155	(420)	(3,207)	(3,892)
Net Income (Loss)	**(32,329)**	**(37,962)**	**(15,479)**	**(19,028)**	**(22,245)**
Total net Impact due to interest rate change (b) - (a)	**3,307**	**7,495**	**19,426**	**11,581**	**9,004**

PF.2 STATEMENT OF FINANCIAL POSITION

2017 GRA - 0.0% Rate Change - Interest Rate Forecast of Banks Only, Excluding Highest
(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Assets					
Cash and cash equivalents	10,755	9,838	10,916	11,819	12,693
Investments	2,208,486	2,202,053	2,168,978	2,177,539	2,222,169
Investment property	40,424	40,853	40,992	41,374	42,330
Accounts receivable	302,393	315,639	328,700	342,506	356,919
Deferred policy acquisition costs	2,903	1,953	3,601	8,110	13,367
Property and equipment	86,248	88,863	90,183	90,345	91,720
Deferred development costs	70,462	77,341	79,991	81,701	64,385
	2,721,671	**2,736,540**	**2,723,361**	**2,753,394**	**2,803,583**
Liabilities					
Due to other insurance companies	113	113	113	113	113
Accounts payable and accrued liabilites	29,447	30,993	31,499	32,418	33,959
Financing lease obligation	2,968	2,899	2,825	2,752	2,678
Unearned premiums and fees	475,671	499,416	523,709	549,429	576,463
Provision for employee current benefits	16,527	16,880	17,244	17,616	17,999
Provision for employee future benefits	286,836	302,414	319,313	336,739	354,910
Provision for unpaid claims	1,711,754	1,719,719	1,681,379	1,682,434	1,700,615
	2,523,316	**2,572,434**	**2,576,082**	**2,621,501**	**2,686,737**
Equity					
Retained earnings	162,168	124,207	108,729	89,700	67,454
Basic Insurance Retained Earnings	-	-	-	-	-
Accumulated Other Comprehensive Income	36,187	39,899	38,550	42,193	49,392
Total Equity	**198,355**	**164,106**	**147,278**	**131,893**	**116,846**
Total Liabilities & Equity	**2,721,671**	**2,736,540**	**2,723,360**	**2,753,394**	**2,803,583**

PF.3 STATEMENT OF CHANGES IN EQUITY

2017 GRA - 0.0% Rate Change - Interest Rate Forecast of Banks Only, Excluding Highest

(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Retained Earnings					
Beginning Balance	194,497	162,168	124,207	108,729	89,700
Net Income (Loss) from annual operations	(32,329)	(37,961)	(15,478)	(19,029)	(22,246)
Premium Rebate	0	0	0	0	0
Transfer (to) / from Non-Basic Retained Earnings	0	0	0	0	0
Total Retained Earnings	**162,168**	**124,207**	**108,729**	**89,700**	**67,454**
Retained Earnings					
Equity Reserve	162,168	124,207	108,729	89,700	67,454
Excess Retained Earnings	0	0	0	0	0
Total Retained Earnings	**162,168**	**124,207**	**108,729**	**89,700**	**67,454**
Total Accumulated Other Comprehensive Income					
Beginning Balance	36,504	36,187	39,899	38,550	42,193
Other Comprehensive Income for the Year	(316)	3,711	(1,349)	3,643	7,199
Total Accumulated Other Comprehensive Income	**36,187**	**39,899**	**38,550**	**42,193**	**49,392**
Total Equity Balance	**198,355**	**164,106**	**147,278**	**131,893**	**116,846**
RESERVE TARGETS					
DCAT Total Equity Target	**231,000**	**181,000**	**181,000**	**181,000**	**181,000**
MCT Total Equity Target	**366,000**	**404,000**	**404,000**	**404,000**	**404,000**

PF.1 STATEMENT OF OPERATIONS

2017 GRA - 2.0% Rate Change - Interest Rate Forecast of Banks Only
(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Motor Vehicles	893,420	954,331	997,909	1,044,039	1,092,429
Drivers	50,393	52,908	55,180	57,424	59,626
Reinsurance Ceded	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Written	**932,181**	**995,363**	**1,040,975**	**1,089,107**	**1,139,452**
Net Premiums Earned					
Motor Vehicles	875,348	926,228	977,803	1,022,756	1,070,103
Drivers	48,478	51,645	54,039	56,298	58,521
Reinsurance Ceded	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Earned	**912,194**	**965,997**	**1,019,728**	**1,066,698**	**1,116,021**
Service Fees & Other Revenues	21,557	23,227	24,999	26,965	28,881
Total Earned Revenues	**933,751**	**989,224**	**1,044,727**	**1,093,663**	**1,144,902**
Net Claims Incurred	766,287	798,532	838,987	874,383	914,395
(a) Claims Incurred - Interest Rate Impact	(6,322)	(59,449)	(115,699)	(52,553)	(44,959)
Total Claims Incurred	**759,965**	**739,083**	**723,288**	**821,830**	**869,436**
Claims Expense	125,191	128,699	133,281	140,762	147,876
Road Safety/Loss Prevention	13,318	13,251	14,131	14,092	14,216
Total Claims Costs	**898,474**	**881,033**	**870,700**	**976,684**	**1,031,528**
Expenses					
Operating	76,908	78,242	82,607	83,384	88,117
Commissions	35,616	37,376	39,402	41,152	42,988
Premium Taxes	27,715	29,336	30,955	32,372	33,859
Regulatory/Appeal	3,421	3,494	3,567	3,641	3,718
Total Expenses	**143,660**	**148,448**	**156,531**	**160,549**	**168,682**
Underwriting Income (Loss)	**(108,383)**	**(40,257)**	**17,496**	**(43,570)**	**(55,308)**
Investment Income	79,529	72,617	83,203	86,273	95,557
(b) Investment Income - Interest Rate Impact	(1,969)	(51,930)	(94,425)	(42,827)	(33,640)
Net Investment Income	**77,560**	**20,687**	**(11,222)**	**43,446**	**61,917**
Net Income (Loss) from Operations for Rate Setting	**(31,954)**	**(25,678)**	**4,947**	**(3,490)**	**1,911**
Add: DPAC / Premium Deficiency adjustment	(1,131)	(6,108)	(1,327)	(3,366)	(4,698)
Net Income (Loss)	**(30,823)**	**(19,570)**	**6,274**	**(124)**	**6,609**
Total net Impact due to interest rate change (b) - (a)	**4,354**	**7,518**	**21,275**	**9,726**	**11,319**

PF.2 STATEMENT OF FINANCIAL POSITION

2017 GRA - 2.0% Rate Change - Interest Rate Forecast of Banks Only
(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Assets					
Cash and cash equivalents	10,771	9,938	11,144	12,144	13,329
Investments	2,202,789	2,211,233	2,187,334	2,224,488	2,291,084
Investment property	40,424	40,918	41,119	41,583	42,630
Accounts receivable	302,393	320,560	333,844	347,885	362,545
Deferred policy acquisition costs	3,272	11,132	13,713	18,406	24,496
Property and equipment	86,248	88,863	90,183	90,345	91,720
Deferred development costs	70,462	77,341	79,991	81,701	64,385
	2,716,359	**2,759,985**	**2,757,328**	**2,816,552**	**2,890,189**
Liabilities					
Due to other insurance companies	113	113	113	113	113
Accounts payable and accrued liabilites	29,447	30,993	31,499	32,418	33,959
Financing lease obligation	2,968	2,899	2,825	2,752	2,678
Unearned premiums and fees	475,671	508,213	532,903	559,044	586,519
Provision for employee current benefits	16,527	16,880	17,244	17,616	17,999
Provision for employee future benefits	286,836	302,414	319,313	336,739	354,910
Provision for unpaid claims	1,704,935	1,713,791	1,662,207	1,669,214	1,680,537
	2,516,497	**2,575,303**	**2,566,104**	**2,617,896**	**2,676,715**
Equity					
Retained earnings	163,674	144,103	150,379	150,255	156,864
Basic Insurance Retained Earnings	-	-	-	-	-
Accumulated Other Comprehensive Income	36,188	40,578	40,844	48,401	56,609
Total Equity	**199,861**	**184,682**	**191,223**	**198,656**	**213,473**
Total Liabilities & Equity	**2,716,358**	**2,759,985**	**2,757,327**	**2,816,552**	**2,890,188**

PF.3 STATEMENT OF CHANGES IN EQUITY

2017 GRA - 2.0% Rate Change - Interest Rate Forecast of Banks Only

(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Retained Earnings					
Beginning Balance	194,497	163,674	144,103	150,379	150,255
Net Income (Loss) from annual operations	(30,823)	(19,570)	6,276	(124)	6,609
Premium Rebate	0	0	0	0	0
Transfer (to) / from Non-Basic Retained Earnings	0	0	0	0	0
Total Retained Earnings	**163,674**	**144,103**	**150,379**	**150,255**	**156,864**
Retained Earnings					
Equity Reserve	163,674	144,103	150,379	150,255	156,864
Excess Retained Earnings	0	0	0	0	0
Total Retained Earnings	**163,674**	**144,103**	**150,379**	**150,255**	**156,864**
Total Accumulated Other Comprehensive Income					
Beginning Balance	36,504	36,188	40,578	40,844	48,401
Other Comprehensive Income for the Year	(316)	4,391	266	7,557	8,209
Total Accumulated Other Comprehensive Income	**36,188**	**40,578**	**40,844**	**48,401**	**56,609**
Total Equity Balance	**199,861**	**184,682**	**191,223**	**198,656**	**213,473**
RESERVE TARGETS					
DCAT Total Equity Target	**231,000**	**181,000**	**181,000**	**181,000**	**181,000**
MCT Total Equity Target	**366,000**	**404,000**	**404,000**	**404,000**	**404,000**

PF.1 STATEMENT OF OPERATIONS

2017 GRA - 2.0% Rate Change - Interest Rate Forecast of Banks Only, Excluding Highest
(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Motor Vehicles	893,420	954,331	997,909	1,044,039	1,092,429
Drivers	50,393	52,908	55,180	57,424	59,626
Reinsurance Ceded	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Written	**932,181**	**995,363**	**1,040,975**	**1,089,107**	**1,139,452**
Net Premiums Earned					
Motor Vehicles	875,348	926,228	977,803	1,022,756	1,070,103
Drivers	48,478	51,645	54,039	56,298	58,521
Reinsurance Ceded	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Earned	**912,194**	**965,997**	**1,019,728**	**1,066,698**	**1,116,021**
Service Fees & Other Revenues	21,557	23,227	24,999	26,965	28,881
Total Earned Revenues	**933,751**	**989,224**	**1,044,727**	**1,093,663**	**1,144,902**
Net Claims Incurred	766,656	798,653	839,899	874,616	914,991
(a) Claims Incurred - Interest Rate Impact	496	(60,974)	(102,134)	(57,671)	(39,869)
Total Claims Incurred	**767,152**	**737,679**	**737,765**	**816,945**	**875,122**
Claims Expense	125,191	128,703	133,284	140,892	147,885
Road Safety/Loss Prevention	13,318	13,251	14,131	14,106	14,216
Total Claims Costs	**905,661**	**879,633**	**885,180**	**971,943**	**1,037,223**
Expenses					
Operating	76,908	78,242	82,607	83,459	88,117
Commissions	35,616	37,376	39,402	41,152	42,988
Premium Taxes	27,715	29,336	30,955	32,372	33,859
Regulatory/Appeal	3,421	3,494	3,567	3,641	3,718
Total Expenses	**143,660**	**148,448**	**156,531**	**160,624**	**168,682**
Underwriting Income (Loss)	**(115,570)**	**(38,857)**	**3,016**	**(38,904)**	**(61,003)**
Investment Income	79,438	72,266	81,999	84,833	93,349
(b) Investment Income - Interest Rate Impact	3,803	(53,217)	(83,611)	(47,361)	(29,747)
Net Investment Income	**83,241**	**19,049**	**(1,612)**	**37,472**	**63,602**
Net Income (Loss) from Operations for Rate Setting	**(33,091)**	**(26,006)**	**835**	**(5,059)**	**(1,840)**
Add: DPAC / Premium Deficiency adjustment	(762)	(6,198)	(569)	(3,627)	(4,439)
Net Income (Loss)	**(32,329)**	**(19,808)**	**1,404**	**(1,432)**	**2,599**
Total net Impact due to interest rate change (b) - (a)	**3,307**	**7,757**	**18,523**	**10,311**	**10,122**

PF.2 STATEMENT OF FINANCIAL POSITION

2017 GRA - 2.0% Rate Change - Interest Rate Forecast of Banks Only, Excluding Highest

(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Assets					
Cash and cash equivalents	10,755	9,881	11,000	11,890	12,928
Investments	2,208,486	2,215,174	2,201,380	2,232,475	2,300,886
Investment property	40,424	40,919	41,120	41,583	42,632
Accounts receivable	302,393	320,560	333,844	347,885	362,545
Deferred policy acquisition costs	2,903	10,854	12,677	17,631	23,463
Property and equipment	86,248	88,863	90,183	90,345	91,720
Deferred development costs	70,462	77,341	79,991	81,701	64,385
	2,721,671	**2,763,592**	**2,770,195**	**2,823,510**	**2,898,559**
Liabilities					
Due to other insurance companies	113	113	113	113	113
Accounts payable and accrued liabilites	29,447	30,993	31,499	32,418	33,959
Financing lease obligation	2,968	2,899	2,825	2,752	2,678
Unearned premiums and fees	475,671	508,213	532,903	559,044	586,519
Provision for employee current benefits	16,527	16,880	17,244	17,616	17,999
Provision for employee future benefits	286,836	302,414	319,313	336,739	354,910
Provision for unpaid claims	1,711,754	1,719,295	1,681,431	1,683,815	1,700,566
	2,523,316	**2,580,807**	**2,585,328**	**2,632,497**	**2,696,744**
Equity					
Retained earnings	162,168	142,360	143,765	142,332	144,931
Basic Insurance Retained Earnings	-	-	-	-	-
Accumulated Other Comprehensive Income	36,187	40,424	41,130	48,681	56,883
Total Equity	**198,355**	**182,784**	**184,894**	**191,013**	**201,813**
Total Liabilities & Equity	**2,721,671**	**2,763,591**	**2,770,222**	**2,823,510**	**2,898,557**

PF.3 STATEMENT OF CHANGES IN EQUITY

2017 GRA - 2.0% Rate Change - Interest Rate Forecast of Banks Only, Excluding Highest

(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Retained Earnings					
Beginning Balance	194,497	162,168	142,360	143,765	142,332
Net Income (Loss) from annual operations	(32,329)	(19,808)	1,405	(1,433)	2,599
Premium Rebate	0	0	0	0	0
Transfer (to) / from Non-Basic Retained Earnings	0	0	0	0	0
Total Retained Earnings	**162,168**	**142,360**	**143,765**	**142,332**	**144,931**
Retained Earnings					
Equity Reserve	162,168	142,360	143,765	142,332	144,931
Excess Retained Earnings	0	0	0	0	0
Total Retained Earnings	**162,168**	**142,360**	**143,765**	**142,332**	**144,931**
Total Accumulated Other Comprehensive Income					
Beginning Balance	36,504	36,187	40,424	41,130	48,681
Other Comprehensive Income for the Year	(316)	4,237	705	7,551	8,202
Total Accumulated Other Comprehensive Income	**36,187**	**40,424**	**41,130**	**48,681**	**56,883**
Total Equity Balance	**198,355**	**182,784**	**184,894**	**191,013**	**201,813**
RESERVE TARGETS					
DCAT Total Equity Target	**231,000**	**181,000**	**181,000**	**181,000**	**181,000**
MCT Total Equity Target	**366,000**	**404,000**	**404,000**	**404,000**	**404,000**

PF.1 STATEMENT OF OPERATIONS

2017 GRA - 0.0% Rate Change - Interest Rate Forecast of Banks Forecast, naïve

(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Motor Vehicles	893,420	935,264	977,983	1,023,201	1,070,634
Drivers	50,393	52,908	55,180	57,424	59,626
Reinsurance Ceded	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Written	**932,181**	**976,296**	**1,021,049**	**1,068,269**	**1,117,657**
Net Premiums Earned					
Motor Vehicles	875,348	915,958	958,273	1,002,338	1,048,749
Drivers	48,478	51,645	54,039	56,298	58,521
Reinsurance Ceded	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Earned	**912,194**	**955,727**	**1,000,198**	**1,046,280**	**1,094,667**
Service Fees & Other Revenues	21,557	23,227	24,889	26,846	28,754
Total Earned Revenues	**933,751**	**978,954**	**1,025,087**	**1,073,126**	**1,123,421**
Net Claims Incurred	766,287	806,884	840,543	876,358	916,600
(a) Claims Incurred - Interest Rate Impact	(6,322)	(59,024)	(89,514)	(38,038)	(32,664)
Total Claims Incurred	**759,965**	**747,860**	**751,029**	**838,320**	**883,936**
Claims Expense	125,191	128,699	133,286	141,019	148,145
Road Safety/Loss Prevention	13,318	13,251	14,131	14,120	14,246
Total Claims Costs	**898,474**	**889,810**	**898,446**	**993,459**	**1,046,327**
Expenses					
Operating	76,908	78,242	82,607	83,533	88,270
Commissions	35,616	37,110	38,773	40,494	42,300
Premium Taxes	27,715	29,028	30,369	31,759	33,218
Regulatory/Appeal	3,421	3,494	3,567	3,641	3,719
Total Expenses	**143,660**	**147,874**	**155,316**	**159,427**	**167,507**
Underwriting Income (Loss)	**(108,383)**	**(58,730)**	**(28,675)**	**(79,760)**	**(90,413)**
Investment Income	79,529	72,772	83,635	82,007	92,361
(b) Investment Income - Interest Rate Impact	(1,969)	(51,773)	(72,382)	(31,639)	(22,836)
Net Investment Income	**77,560**	**20,999**	**11,253**	**50,368**	**69,525**
Net Income (Loss) from Operations for Rate Setting	**(31,954)**	**(35,486)**	**(17,205)**	**(31,468)**	**(24,344)**
Add: DPAC / Premium Deficiency adjustment	(1,131)	2,245	217	(2,076)	(3,456)
Net Income (Loss)	**(30,823)**	**(37,731)**	**(17,422)**	**(29,392)**	**(20,888)**
Total net Impact due to interest rate change (b) - (a)	**4,354**	**7,250**	**17,131**	**6,398**	**9,828**

PF.2 STATEMENT OF FINANCIAL POSITION

2017 GRA - 0.0% Rate Change - Interest Rate Forecast of Banks Forecast, naïve
(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Assets					
Cash and cash equivalents	10,771	9,895	10,973	11,512	12,414
Investments	2,202,789	2,198,107	2,176,197	2,200,446	2,248,891
Investment property	40,424	40,852	40,990	41,374	42,328
Accounts receivable	302,393	315,639	328,700	342,506	356,919
Deferred policy acquisition costs	3,272	2,231	3,243	6,620	11,441
Property and equipment	86,248	88,863	90,183	90,345	91,720
Deferred development costs	70,462	77,341	79,991	81,701	64,385
	2,716,359	**2,732,928**	**2,730,277**	**2,774,504**	**2,828,098**
Liabilities					
Due to other insurance companies	113	113	113	113	113
Accounts payable and accrued liabilites	29,447	30,993	31,499	32,418	33,959
Financing lease obligation	2,968	2,899	2,825	2,752	2,678
Unearned premiums and fees	475,671	499,416	523,709	549,429	576,463
Provision for employee current benefits	16,527	16,880	17,244	17,616	17,999
Provision for employee future benefits	286,836	302,414	319,313	336,739	354,910
Provision for unpaid claims	1,704,935	1,714,216	1,688,829	1,711,037	1,735,619
	2,516,497	**2,566,931**	**2,583,532**	**2,650,104**	**2,721,741**
Equity					
Retained earnings	163,674	125,943	108,522	79,128	58,240
Basic Insurance Retained Earnings	-	-	-	-	-
Accumulated Other Comprehensive Income	36,188	40,052	38,222	45,272	48,117
Total Equity	**199,861**	**165,995**	**146,744**	**124,400**	**106,357**
Total Liabilities & Equity	**2,716,358**	**2,732,926**	**2,730,276**	**2,774,504**	**2,828,098**

PF.3 STATEMENT OF CHANGES IN EQUITY

2017 GRA - 0.0% Rate Change - Interest Rate Forecast of Banks Forecast, naïve
(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Retained Earnings					
Beginning Balance	194,497	163,674	125,943	108,522	79,128
Net Income (Loss) from annual operations	(30,823)	(37,731)	(17,421)	(29,394)	(20,888)
Premium Rebate	0	0	0	0	0
Transfer (to) / from Non-Basic Retained Earnings	0	0	0	0	0
Total Retained Earnings	**163,674**	**125,943**	**108,522**	**79,128**	**58,240**
Retained Earnings					
Equity Reserve	163,674	125,943	108,522	79,128	58,240
Excess Retained Earnings	0	0	0	0	0
Total Retained Earnings	**163,674**	**125,943**	**108,522**	**79,128**	**58,240**
Total Accumulated Other Comprehensive Income					
Beginning Balance	36,504	36,188	40,052	38,222	45,272
Other Comprehensive Income for the Year	(316)	3,865	(1,830)	7,050	2,845
Total Accumulated Other Comprehensive Income	**36,188**	**40,052**	**38,222**	**45,272**	**48,117**
Total Equity Balance	**199,861**	**165,995**	**146,744**	**124,400**	**106,357**
RESERVE TARGETS					
DCAT Total Equity Target	**231,000**	**181,000**	**181,000**	**181,000**	**181,000**
MCT Total Equity Target	**366,000**	**404,000**	**404,000**	**404,000**	**404,000**

PF.1 STATEMENT OF OPERATIONS

2017 GRA - 0.0% Rate Change - Interest Rate Forecast of Banks Forecast, naïve. Excluding highest Bank Forecast
(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Motor Vehicles	893,420	935,264	977,983	1,023,201	1,070,634
Drivers	50,393	52,908	55,180	57,424	59,626
Reinsurance Ceded	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Written	**932,181**	**976,296**	**1,021,049**	**1,068,269**	**1,117,657**
Net Premiums Earned					
Motor Vehicles	875,348	915,958	958,273	1,002,338	1,048,749
Drivers	48,478	51,645	54,039	56,298	58,521
Reinsurance Ceded	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Earned	**912,194**	**955,727**	**1,000,198**	**1,046,280**	**1,094,667**
Service Fees & Other Revenues	21,557	23,227	24,889	26,846	28,754
Total Earned Revenues	**933,751**	**978,954**	**1,025,087**	**1,073,126**	**1,123,421**
Net Claims Incurred	766,656	807,006	841,398	876,828	917,117
(a) Claims Incurred - Interest Rate Impact	496	(60,551)	(76,984)	(38,932)	(29,818)
Total Claims Incurred	**767,152**	**746,455**	**764,414**	**837,896**	**887,299**
Claims Expense	125,191	128,703	133,289	141,148	148,156
Road Safety/Loss Prevention	13,318	13,251	14,131	14,135	14,246
Total Claims Costs	**905,661**	**888,409**	**911,834**	**993,179**	**1,049,701**
Expenses					
Operating	76,908	78,242	82,607	83,608	88,270
Commissions	35,616	37,110	38,773	40,494	42,300
Premium Taxes	27,715	29,028	30,369	31,759	33,218
Regulatory/Appeal	3,421	3,494	3,567	3,641	3,719
Total Expenses	**143,660**	**147,874**	**155,316**	**159,502**	**167,507**
Underwriting Income (Loss)	**(115,570)**	**(57,329)**	**(42,063)**	**(79,555)**	**(93,787)**
Investment Income	79,438	72,423	82,673	80,405	90,760
(b) Investment Income - Interest Rate Impact	3,803	(53,056)	(62,627)	(32,712)	(20,678)
Net Investment Income	**83,241**	**19,367**	**20,046**	**47,693**	**70,082**
Net Income (Loss) from Operations for Rate Setting	**(33,091)**	**(35,807)**	**(21,100)**	**(33,933)**	**(27,049)**
Add: DPAC / Premium Deficiency adjustment	(762)	2,155	917	(2,071)	(3,344)
Net Income (Loss)	**(32,329)**	**(37,962)**	**(22,017)**	**(31,862)**	**(23,705)**
Total net Impact due to interest rate change (b) - (a)	**3,307**	**7,495**	**14,356**	**6,220**	**9,140**

PF.2 STATEMENT OF FINANCIAL POSITION

2017 GRA - 0.0% Rate Change - Interest Rate Forecast of Banks Forecast, naïve. Excluding highest Bank Forecast
(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Assets					
Cash and cash equivalents	10,755	9,838	10,852	11,287	12,088
Investments	2,208,486	2,202,053	2,189,205	2,210,627	2,259,266
Investment property	40,424	40,853	40,992	41,376	42,332
Accounts receivable	302,393	315,639	328,700	342,506	356,919
Deferred policy acquisition costs	2,903	1,953	2,265	5,637	10,346
Property and equipment	86,248	88,863	90,183	90,345	91,720
Deferred development costs	70,462	77,341	79,991	81,701	64,385
	2,721,671	**2,736,540**	**2,742,188**	**2,783,479**	**2,837,056**
Liabilities					
Due to other insurance companies	113	113	113	113	113
Accounts payable and accrued liabilites	29,447	30,993	31,499	32,418	33,959
Financing lease obligation	2,968	2,899	2,825	2,752	2,678
Unearned premiums and fees	475,671	499,416	523,709	549,429	576,463
Provision for employee current benefits	16,527	16,880	17,244	17,616	17,999
Provision for employee future benefits	286,836	302,414	319,313	336,739	354,910
Provision for unpaid claims	1,711,754	1,719,719	1,707,016	1,728,794	1,756,628
	2,523,316	**2,572,434**	**2,601,719**	**2,667,861**	**2,742,750**
Equity					
Retained earnings	162,168	124,207	102,191	70,329	46,624
Basic Insurance Retained Earnings	-	-	-	-	-
Accumulated Other Comprehensive Income	36,187	39,899	38,277	45,287	47,682
Total Equity	**198,355**	**164,106**	**140,468**	**115,617**	**94,306**
Total Liabilities & Equity	**2,721,671**	**2,736,540**	**2,742,187**	**2,783,478**	**2,837,056**

PF.3 STATEMENT OF CHANGES IN EQUITY

2017 GRA - 0.0% Rate Change - Interest Rate Forecast of Banks Forecast, naïve. Excluding highest Bank Forecast

(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Retained Earnings					
Beginning Balance	194,497	162,168	124,207	102,191	70,329
Net Income (Loss) from annual operations	(32,329)	(37,961)	(22,016)	(31,862)	(23,705)
Premium Rebate	0	0	0	0	0
Transfer (to) / from Non-Basic Retained Earnings	0	0	0	0	0
Total Retained Earnings	**162,168**	**124,207**	**102,191**	**70,329**	**46,624**
Retained Earnings					
Equity Reserve	162,168	124,207	102,191	70,329	46,624
Excess Retained Earnings	0	0	0	0	0
Total Retained Earnings	**162,168**	**124,207**	**102,191**	**70,329**	**46,624**
Total Accumulated Other Comprehensive Income					
Beginning Balance	36,504	36,187	39,899	38,277	45,287
Other Comprehensive Income for the Year	(316)	3,711	(1,622)	7,011	2,394
Total Accumulated Other Comprehensive Income	**36,187**	**39,899**	**38,277**	**45,287**	**47,682**
Total Equity Balance	**198,355**	**164,106**	**140,468**	**115,617**	**94,306**
RESERVE TARGETS					
DCAT Total Equity Target	**231,000**	**181,000**	**181,000**	**181,000**	**181,000**
MCT Total Equity Target	**366,000**	**404,000**	**404,000**	**404,000**	**404,000**

PF.1 STATEMENT OF OPERATIONS

2017 GRA - 2.0% Rate Change - Interest Rate Forecast of Banks Forecast, naïve
(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Motor Vehicles	893,420	954,331	997,909	1,044,039	1,092,429
Drivers	50,393	52,908	55,180	57,424	59,626
Reinsurance Ceded	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Written	**932,181**	**995,363**	**1,040,975**	**1,089,107**	**1,139,452**
Net Premiums Earned					
Motor Vehicles	875,348	926,228	977,803	1,022,756	1,070,103
Drivers	48,478	51,645	54,039	56,298	58,521
Reinsurance Ceded	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Earned	**912,194**	**965,997**	**1,019,728**	**1,066,698**	**1,116,021**
Service Fees & Other Revenues	21,557	23,227	24,999	26,965	28,881
Total Earned Revenues	**933,751**	**989,224**	**1,044,727**	**1,093,663**	**1,144,902**
Net Claims Incurred	766,287	798,532	840,378	875,765	916,191
(a) Claims Incurred - Interest Rate Impact	(6,322)	(59,449)	(89,399)	(38,850)	(31,355)
Total Claims Incurred	**759,965**	**739,083**	**750,979**	**836,915**	**884,836**
Claims Expense	125,191	128,699	133,281	140,897	148,020
Road Safety/Loss Prevention	13,318	13,251	14,131	14,106	14,231
Total Claims Costs	**898,474**	**881,033**	**898,391**	**991,918**	**1,047,087**
Expenses					
Operating	76,908	78,242	82,607	83,459	88,193
Commissions	35,616	37,376	39,402	41,152	42,988
Premium Taxes	27,715	29,336	30,955	32,372	33,859
Regulatory/Appeal	3,421	3,494	3,567	3,641	3,719
Total Expenses	**143,660**	**148,448**	**156,531**	**160,624**	**168,759**
Underwriting Income (Loss)	**(108,383)**	**(40,257)**	**(10,195)**	**(58,879)**	**(70,944)**
Investment Income	79,529	72,617	82,802	83,789	91,073
(b) Investment Income - Interest Rate Impact	(1,969)	(51,930)	(72,790)	(32,093)	(23,067)
Net Investment Income	**77,560**	**20,687**	**10,012**	**51,696**	**68,006**
Net Income (Loss) from Operations for Rate Setting	**(31,954)**	**(25,678)**	**(119)**	**(9,844)**	**(6,777)**
Add: DPAC / Premium Deficiency adjustment	(1,131)	(6,108)	64	(2,661)	(3,839)
Net Income (Loss)	**(30,823)**	**(19,570)**	**(183)**	**(7,183)**	**(2,938)**
Total net Impact due to interest rate change (b) - (a)	**4,354**	**7,518**	**16,609**	**6,756**	**8,288**

PF.2 STATEMENT OF FINANCIAL POSITION

2017 GRA - 2.0% Rate Change - Interest Rate Forecast of Banks Forecast, naïve
(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Assets					
Cash and cash equivalents	10,771	9,938	11,055	11,752	12,565
Investments	2,202,789	2,211,233	2,208,616	2,254,067	2,326,846
Investment property	40,424	40,918	41,119	41,584	42,634
Accounts receivable	302,393	320,560	333,844	347,885	362,545
Deferred policy acquisition costs	3,272	11,132	12,322	16,310	21,541
Property and equipment	86,248	88,863	90,183	90,345	91,720
Deferred development costs	70,462	77,341	79,991	81,701	64,385
	2,716,359	**2,759,985**	**2,777,130**	**2,843,644**	**2,922,236**
Liabilities					
Due to other insurance companies	113	113	113	113	113
Accounts payable and accrued liabilites	29,447	30,993	31,499	32,418	33,959
Financing lease obligation	2,968	2,899	2,825	2,752	2,678
Unearned premiums and fees	475,671	508,213	532,903	559,044	586,519
Provision for employee current benefits	16,527	16,880	17,244	17,616	17,999
Provision for employee future benefits	286,836	302,414	319,313	336,739	354,910
Provision for unpaid claims	1,704,935	1,713,791	1,688,507	1,709,895	1,735,759
	2,516,497	**2,575,303**	**2,592,404**	**2,658,577**	**2,731,937**
Equity					
Retained earnings	163,674	144,103	143,921	136,739	133,800
Basic Insurance Retained Earnings	-	-	-	-	-
Accumulated Other Comprehensive Income	36,188	40,578	40,803	48,329	56,498
Total Equity	**199,861**	**184,682**	**184,724**	**185,068**	**190,298**
Total Liabilities & Equity	**2,716,358**	**2,759,985**	**2,777,128**	**2,843,645**	**2,922,235**

PF.3 STATEMENT OF CHANGES IN EQUITY

2017 GRA - 2.0% Rate Change - Interest Rate Forecast of Banks Forecast, naïve

(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Retained Earnings					
Beginning Balance	194,497	163,674	144,103	143,921	136,739
Net Income (Loss) from annual operations	(30,823)	(19,570)	(182)	(7,183)	(2,939)
Premium Rebate	0	0	0	0	0
Transfer (to) / from Non-Basic Retained Earnings	0	0	0	0	0
Total Retained Earnings	**163,674**	**144,103**	**143,921**	**136,739**	**133,800**
Retained Earnings					
Equity Reserve	163,674	144,103	143,921	136,739	133,800
Excess Retained Earnings	0	0	0	0	0
Total Retained Earnings	**163,674**	**144,103**	**143,921**	**136,739**	**133,800**
Total Accumulated Other Comprehensive Income					
Beginning Balance	36,504	36,188	40,578	40,803	48,329
Other Comprehensive Income for the Year	(316)	4,391	225	7,526	8,169
Total Accumulated Other Comprehensive Income	**36,188**	**40,578**	**40,803**	**48,329**	**56,498**
Total Equity Balance	**199,861**	**184,682**	**184,724**	**185,068**	**190,298**
RESERVE TARGETS					
DCAT Total Equity Target	**231,000**	**181,000**	**181,000**	**181,000**	**181,000**
MCT Total Equity Target	**366,000**	**404,000**	**404,000**	**404,000**	**404,000**

PF.1 STATEMENT OF OPERATIONS

2017 GRA - 2.0% Rate Change - Interest Rate Forecast of Banks Forecast, naïve. Excluding highest Bank Forecast

(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Motor Vehicles	893,420	954,331	997,909	1,044,039	1,092,429
Drivers	50,393	52,908	55,180	57,424	59,626
Reinsurance Ceded	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Written	**932,181**	**995,363**	**1,040,975**	**1,089,107**	**1,139,452**
Net Premiums Earned					
Motor Vehicles	875,348	926,228	977,803	1,022,756	1,070,103
Drivers	48,478	51,645	54,039	56,298	58,521
Reinsurance Ceded	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Earned	**912,194**	**965,997**	**1,019,728**	**1,066,698**	**1,116,021**
Service Fees & Other Revenues	21,557	23,227	24,999	26,965	28,881
Total Earned Revenues	**933,751**	**989,224**	**1,044,727**	**1,093,663**	**1,144,902**
Net Claims Incurred	766,656	798,653	841,152	876,219	916,775
(a) Claims Incurred - Interest Rate Impact	496	(60,974)	(77,296)	(40,079)	(28,283)
Total Claims Incurred	**767,152**	**737,679**	**763,856**	**836,140**	**888,492**
Claims Expense	125,191	128,703	133,284	141,025	148,149
Road Safety/Loss Prevention	13,318	13,251	14,131	14,120	14,246
Total Claims Costs	**905,661**	**879,633**	**911,271**	**991,285**	**1,050,887**
Expenses					
Operating	76,908	78,242	82,607	83,533	88,270
Commissions	35,616	37,376	39,402	41,152	42,988
Premium Taxes	27,715	29,336	30,955	32,372	33,859
Regulatory/Appeal	3,421	3,494	3,567	3,641	3,719
Total Expenses	**143,660**	**148,448**	**156,531**	**160,698**	**168,836**
Underwriting Income (Loss)	**(115,570)**	**(38,857)**	**(23,075)**	**(58,320)**	**(74,821)**
Investment Income	79,438	72,266	81,856	82,159	89,054
(b) Investment Income - Interest Rate Impact	3,803	(53,217)	(62,975)	(33,243)	(20,864)
Net Investment Income	**83,241**	**19,049**	**18,881**	**48,916**	**68,190**
Net Income (Loss) from Operations for Rate Setting	**(33,091)**	**(26,006)**	**(3,509)**	**(12,064)**	**(10,274)**
Add: DPAC / Premium Deficiency adjustment	(762)	(6,198)	685	(2,660)	(3,643)
Net Income (Loss)	**(32,329)**	**(19,808)**	**(4,194)**	**(9,404)**	**(6,631)**
Total net Impact due to interest rate change (b) - (a)	**3,307**	**7,757**	**14,322**	**6,836**	**7,418**

PF.2 STATEMENT OF FINANCIAL POSITION

2017 GRA - 2.0% Rate Change - Interest Rate Forecast of Banks Forecast, naïve. Excluding highest Bank Forecast
(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Assets					
Cash and cash equivalents	10,755	9,881	10,931	11,502	12,197
Investments	2,208,486	2,215,174	2,221,699	2,264,277	2,337,132
Investment property	40,424	40,919	41,121	41,584	42,633
Accounts receivable	302,393	320,560	333,844	347,885	362,545
Deferred policy acquisition costs	2,903	10,854	11,423	15,410	20,446
Property and equipment	86,248	88,863	90,183	90,345	91,720
Deferred development costs	70,462	77,341	79,991	81,701	64,385
	2,721,671	**2,763,592**	**2,789,192**	**2,852,704**	**2,931,058**
Liabilities					
Due to other insurance companies	113	113	113	113	113
Accounts payable and accrued liabilites	29,447	30,993	31,499	32,418	33,959
Financing lease obligation	2,968	2,899	2,825	2,752	2,678
Unearned premiums and fees	475,671	508,213	532,903	559,044	586,519
Provision for employee current benefits	16,527	16,880	17,244	17,616	17,999
Provision for employee future benefits	286,836	302,414	319,313	336,739	354,910
Provision for unpaid claims	1,711,754	1,719,295	1,706,268	1,726,880	1,756,205
	2,523,316	**2,580,807**	**2,610,165**	**2,675,562**	**2,752,383**
Equity					
Retained earnings	162,168	142,360	138,167	128,762	122,131
Basic Insurance Retained Earnings	-	-	-	-	-
Accumulated Other Comprehensive Income	36,187	40,424	40,858	48,381	56,543
Total Equity	**198,355**	**182,784**	**179,025**	**177,143**	**178,674**
Total Liabilities & Equity	**2,721,671**	**2,763,591**	**2,789,190**	**2,852,705**	**2,931,057**

PF.3 STATEMENT OF CHANGES IN EQUITY

2017 GRA - 2.0% Rate Change - Interest Rate Forecast of Banks Forecast, naïve. Excluding highest Bank Forecast

(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Retained Earnings					
Beginning Balance	194,497	162,168	142,360	138,167	128,762
Net Income (Loss) from annual operations	(32,329)	(19,808)	(4,193)	(9,405)	(6,631)
Premium Rebate	0	0	0	0	0
Transfer (to) / from Non-Basic Retained Earnings	0	0	0	0	0
Total Retained Earnings	**162,168**	**142,360**	**138,167**	**128,762**	**122,131**
Retained Earnings					
Equity Reserve	162,168	142,360	138,167	128,762	122,131
Excess Retained Earnings	0	0	0	0	0
Total Retained Earnings	**162,168**	**142,360**	**138,167**	**128,762**	**122,131**
Total Accumulated Other Comprehensive Income					
Beginning Balance	36,504	36,187	40,424	40,858	48,381
Other Comprehensive Income for the Year	(316)	4,237	434	7,523	8,162
Total Accumulated Other Comprehensive Income	**36,187**	**40,424**	**40,858**	**48,381**	**56,543**
Total Equity Balance	**198,355**	**182,784**	**179,025**	**177,143**	**178,674**
RESERVE TARGETS					
DCAT Total Equity Target	**231,000**	**181,000**	**181,000**	**181,000**	**181,000**
MCT Total Equity Target	**366,000**	**404,000**	**404,000**	**404,000**	**404,000**

PF.1 STATEMENT OF OPERATIONS

2017 GRA - 0.0% Rate Change - Interest Rate Forecast using average of Banks and naïve Forecasts
(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Motor Vehicles	893,420	935,264	977,983	1,023,201	1,070,634
Drivers	50,393	52,908	55,180	57,424	59,626
Reinsurance Ceded	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Written	**932,181**	**976,296**	**1,021,049**	**1,068,269**	**1,117,657**
Net Premiums Earned					
Motor Vehicles	875,348	915,958	958,273	1,002,338	1,048,749
Drivers	48,478	51,645	54,039	56,298	58,521
Reinsurance Ceded	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Earned	**912,194**	**955,727**	**1,000,198**	**1,046,280**	**1,094,667**
Service Fees & Other Revenues	21,557	23,227	24,889	26,846	28,754
Total Earned Revenues	**933,751**	**978,954**	**1,025,087**	**1,073,126**	**1,123,421**
Net Claims Incurred	766,287	806,881	839,832	875,569	915,746
(a) Claims Incurred - Interest Rate Impact	(6,322)	(59,449)	(102,614)	(45,693)	(38,416)
Total Claims Incurred	**759,965**	**747,432**	**737,218**	**829,876**	**877,330**
Claims Expense	125,191	128,699	133,286	140,893	148,013
Road Safety/Loss Prevention	13,318	13,251	14,131	14,106	14,231
Total Claims Costs	**898,474**	**889,382**	**884,635**	**984,875**	**1,039,574**
Expenses					
Operating	76,908	78,242	82,607	83,459	88,193
Commissions	35,616	37,110	38,773	40,494	42,300
Premium Taxes	27,715	29,028	30,369	31,759	33,218
Regulatory/Appeal	3,421	3,494	3,567	3,641	3,719
Total Expenses	**143,660**	**147,874**	**155,316**	**159,353**	**167,430**
Underwriting Income (Loss)	**(108,383)**	**(58,302)**	**(14,864)**	**(71,102)**	**(83,583)**
Investment Income	79,529	72,772	83,710	83,287	94,291
(b) Investment Income - Interest Rate Impact	(1,969)	(51,773)	(83,250)	(37,093)	(28,253)
Net Investment Income	**77,560**	**20,999**	**460**	**46,194**	**66,038**
Net Income (Loss) from Operations for Rate Setting	**(31,954)**	**(35,062)**	**(14,887)**	**(27,425)**	**(21,360)**
Add: DPAC / Premium Deficiency adjustment	(1,131)	2,241	(483)	(2,517)	(3,815)
Net Income (Loss)	**(30,823)**	**(37,303)**	**(14,404)**	**(24,908)**	**(17,545)**
Total net Impact due to interest rate change (b) - (a)	**4,354**	**7,675**	**19,364**	**8,600**	**10,162**

PF.2 STATEMENT OF FINANCIAL POSITION

2017 GRA - 0.0% Rate Change - Interest Rate Forecast using average of Banks and naïve Forecasts
(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Assets					
Cash and cash equivalents	10,771	9,893	11,004	11,697	12,754
Investments	2,202,789	2,197,802	2,164,279	2,186,976	2,229,867
Investment property	40,424	40,846	40,968	41,400	42,306
Accounts receivable	302,393	315,639	328,700	342,506	356,919
Deferred policy acquisition costs	3,272	2,234	3,946	7,764	12,944
Property and equipment	86,248	88,863	90,183	90,345	91,720
Deferred development costs	70,462	77,341	79,991	81,701	64,385
	2,716,359	**2,732,618**	**2,719,071**	**2,762,389**	**2,810,895**
Liabilities					
Due to other insurance companies	113	113	113	113	113
Accounts payable and accrued liabilites	29,447	30,993	31,499	32,418	33,959
Financing lease obligation	2,968	2,899	2,825	2,752	2,678
Unearned premiums and fees	475,671	499,416	523,709	549,429	576,463
Provision for employee current benefits	16,527	16,880	17,244	17,616	17,999
Provision for employee future benefits	286,836	302,414	319,313	336,739	354,910
Provision for unpaid claims	1,704,935	1,713,791	1,675,293	1,689,497	1,707,832
	2,516,497	**2,566,506**	**2,569,996**	**2,628,564**	**2,693,954**
Equity					
Retained earnings	163,674	126,371	111,969	87,061	69,516
Basic Insurance Retained Earnings	-	-	-	-	-
Accumulated Other Comprehensive Income	36,188	40,052	38,309	45,403	48,651
Total Equity	**199,861**	**166,423**	**150,277**	**132,464**	**118,167**
Total Liabilities & Equity	**2,716,358**	**2,732,929**	**2,720,273**	**2,761,028**	**2,812,121**

Manitoba Public Insurance

PF.3 STATEMENT OF CHANGES IN EQUITY

2017 GRA - 0.0% Rate Change - Interest Rate Forecast using average of Banks and naïve Forecasts

(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Retained Earnings					
Beginning Balance	194,497	163,674	126,371	111,969	87,061
Net Income (Loss) from annual operations	(30,823)	(37,302)	(14,402)	(24,908)	(17,545)
Premium Rebate	0	0	0	0	0
Transfer (to) / from Non-Basic Retained Earnings	0	0	0	0	0
Total Retained Earnings	**163,674**	**126,371**	**111,969**	**87,061**	**69,516**
Retained Earnings					
Equity Reserve	163,674	126,371	111,969	87,061	69,516
Excess Retained Earnings	0	0	0	0	0
Total Retained Earnings	**163,674**	**126,371**	**111,969**	**87,061**	**69,516**
Total Accumulated Other Comprehensive Income					
Beginning Balance	36,504	36,188	40,052	38,309	45,403
Other Comprehensive Income for the Year	(316)	3,865	(1,743)	7,094	3,248
Total Accumulated Other Comprehensive Income	**36,188**	**40,052**	**38,309**	**45,403**	**48,651**
Total Equity Balance	**199,861**	**166,423**	**150,277**	**132,464**	**118,167**
RESERVE TARGETS					
DCAT Total Equity Target	**231,000**	**181,000**	**181,000**	**181,000**	**181,000**
MCT Total Equity Target	**366,000**	**404,000**	**404,000**	**404,000**	**404,000**

PF.1 STATEMENT OF OPERATIONS

2017 GRA - 2.0% Rate Change - Interest Rate Forecast using average of Banks and naïve Forecasts
(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Motor Vehicles	893,420	954,331	997,909	1,044,039	1,092,429
Drivers	50,393	52,908	55,180	57,424	59,626
Reinsurance Ceded	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Written	**932,181**	**995,363**	**1,040,975**	**1,089,107**	**1,139,452**
Net Premiums Earned					
Motor Vehicles	875,348	926,228	977,803	1,022,756	1,070,103
Drivers	48,478	51,645	54,039	56,298	58,521
Reinsurance Ceded	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Earned	**912,194**	**965,997**	**1,019,728**	**1,066,698**	**1,116,021**
Service Fees & Other Revenues	21,557	23,227	24,999	26,965	28,881
Total Earned Revenues	**933,751**	**989,224**	**1,044,727**	**1,093,663**	**1,144,902**
Net Claims Incurred	766,287	798,532	839,678	875,070	915,279
(a) Claims Incurred - Interest Rate Impact	(6,322)	(59,449)	(102,614)	(45,693)	(38,416)
Total Claims Incurred	**759,965**	**739,083**	**737,064**	**829,377**	**876,863**
Claims Expense	125,191	128,699	133,281	140,888	147,888
Road Safety/Loss Prevention	13,318	13,251	14,131	14,106	14,216
Total Claims Costs	**898,474**	**881,033**	**884,476**	**984,371**	**1,038,967**
Expenses					
Operating	76,908	78,242	82,607	83,459	88,117
Commissions	35,616	37,376	39,402	41,152	42,988
Premium Taxes	27,715	29,336	30,955	32,372	33,859
Regulatory/Appeal	3,421	3,494	3,567	3,641	3,718
Total Expenses	**143,660**	**148,448**	**156,531**	**160,624**	**168,682**
Underwriting Income (Loss)	**(108,383)**	**(40,257)**	**3,720**	**(51,332)**	**(62,747)**
Investment Income	79,529	72,617	82,988	85,124	93,344
(b) Investment Income - Interest Rate Impact	(1,969)	(51,930)	(83,731)	(37,568)	(28,531)
Net Investment Income	**77,560**	**20,687**	**(743)**	**47,556**	**64,813**
Net Income (Loss) from Operations for Rate Setting	**(31,954)**	**(25,678)**	**2,341**	**(6,792)**	**(2,216)**
Add: DPAC / Premium Deficiency adjustment	(1,131)	(6,108)	(636)	(3,016)	(4,282)
Net Income (Loss)	**(30,823)**	**(19,570)**	**2,977**	**(3,776)**	**2,066**
Total net Impact due to interest rate change (b) - (a)	**4,354**	**7,518**	**18,883**	**8,125**	**9,885**

PF.2 STATEMENT OF FINANCIAL POSITION

2017 GRA - 2.0% Rate Change - Interest Rate Forecast using average of Banks and naïve Forecasts
(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Assets					
Cash and cash equivalents	10,771	9,938	11,099	11,953	12,951
Investments	2,202,789	2,211,233	2,197,837	2,239,005	2,308,637
Investment property	40,424	40,918	41,119	41,581	42,632
Accounts receivable	302,393	320,560	333,844	347,885	362,545
Deferred policy acquisition costs	3,272	11,132	13,022	17,365	23,040
Property and equipment	86,248	88,863	90,183	90,345	91,720
Deferred development costs	70,462	77,341	79,991	81,701	64,385
	2,716,359	**2,759,985**	**2,767,095**	**2,829,835**	**2,905,910**
Liabilities					
Due to other insurance companies	113	113	113	113	113
Accounts payable and accrued liabilites	29,447	30,993	31,499	32,418	33,959
Financing lease obligation	2,968	2,899	2,825	2,752	2,678
Unearned premiums and fees	475,671	508,213	532,903	559,044	586,519
Provision for employee current benefits	16,527	16,880	17,244	17,616	17,999
Provision for employee future benefits	286,836	302,414	319,313	336,739	354,910
Provision for unpaid claims	1,704,935	1,713,791	1,675,293	1,689,497	1,707,832
	2,516,497	**2,575,303**	**2,579,190**	**2,638,179**	**2,704,010**
Equity					
Retained earnings	163,674	144,103	147,082	143,305	145,370
Basic Insurance Retained Earnings	-	-	-	-	-
Accumulated Other Comprehensive Income	36,188	40,578	40,823	48,352	56,530
Total Equity	**199,861**	**184,682**	**187,905**	**191,657**	**201,900**
Total Liabilities & Equity	**2,716,358**	**2,759,985**	**2,767,095**	**2,829,836**	**2,905,910**

Manitoba Public Insurance

PF.3 STATEMENT OF CHANGES IN EQUITY

2017 GRA - 2.0% Rate Change - Interest Rate Forecast using average of Banks and naïve Forecasts

(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Retained Earnings					
Beginning Balance	194,497	163,674	144,103	147,082	143,305
Net Income (Loss) from annual operations	(30,823)	(19,570)	2,978	(3,776)	2,065
Premium Rebate	0	0	0	0	0
Transfer (to) / from Non-Basic Retained Earnings	0	0	0	0	0
Total Retained Earnings	**163,674**	**144,103**	**147,082**	**143,305**	**145,370**
Retained Earnings					
Equity Reserve	163,674	144,103	147,082	143,305	145,370
Excess Retained Earnings	0	0	0	0	0
Total Retained Earnings	**163,674**	**144,103**	**147,082**	**143,305**	**145,370**
Total Accumulated Other Comprehensive Income					
Beginning Balance	36,504	36,188	40,578	40,823	48,352
Other Comprehensive Income for the Year	(316)	4,391	245	7,528	8,178
Total Accumulated Other Comprehensive Income	**36,188**	**40,578**	**40,823**	**48,352**	**56,530**
Total Equity Balance	**199,861**	**184,682**	**187,905**	**191,657**	**201,900**
RESERVE TARGETS					
DCAT Total Equity Target	**231,000**	**181,000**	**181,000**	**181,000**	**181,000**
MCT Total Equity Target	**366,000**	**404,000**	**404,000**	**404,000**	**404,000**

2017 GRA - 0.0% Rate Change - Interest Rate Forecast of Banks only

	2016/17	2017/18	2018/19	2019/20	2020/21
			Forecasted		
Interest Income During Period					
Cash/Short Term Investments	42	0	0	0	0
Marketable Bonds	37,248	34,357	36,458	42,309	49,422
MUSH	28,903	28,561	28,283	27,690	27,928
Total	**66,193**	**62,918**	**64,741**	**69,999**	**77,350**
Dividend and other Income					
Canadian Equities	9,139	9,221	9,327	9,956	10,494
US Equities	4,394	4,947	4,951	5,288	5,589
Investment Properties (CityPlace)	3,431	2,149	4,952	4,873	4,771
Infrastructure	1,268	1,721	1,828	1,931	2,039
Total	**18,232**	**18,038**	**21,057**	**22,047**	**22,893**
Gains During Period - Profit & Loss					
Marketable Bonds Unrealized Gains/(Loss)	(5,545)	(49,650)	(93,054)	(43,078)	(35,003)
Marketable Bonds Realized Gains/(Loss)	3,242	(11,477)	(19,314)	(8,228)	(6,037)
MUSH	(8,094)	(7,391)	(2,938)	2,186	4,997
Amortization of Bond Premium/Discount	0	0	0	0	0
Canadian Equities Realized Gains	11,004	8,205	10,371	6,449	8,731
US Equities Realized Gains	6,976	2,829	5,902	0	2,649
Real Estate	12,618	14,271	14,667	15,547	16,480
Infrastructure	4,971	6,740	7,164	7,566	7,989
Total	**25,173**	**(36,473)**	**(77,202)**	**(19,558)**	**(194)**
Other					
Investment Fees Paid	(4,449)	(4,620)	(4,733)	(4,971)	(5,256)
Pension Expense	(14,401)	(15,071)	(15,763)	(16,483)	(17,235)
Venture Capital Income					
Investment Write-Down	(18,850)	(19,691)	(20,496)	(21,454)	(22,491)
Total Investment Income	**90,748**	**24,793**	**(11,900)**	**51,034**	**77,557**
Basic Allocation Investment Income	77,560	20,999	(9,951)	42,071	62,976
Basic Allocation	85.5%	84.7%	83.6%	82.4%	81.2%

2017 GRA - 0.0% Rate Change - Interest Rate Forecast of Banks Only, Excluding Highest

	2016/17	2017/18	2018/19	2019/20	2020/21
			Forecasted		
Interest Income During Period					
Cash/Short Term Investments	42	0	0	0	0
Marketable Bonds	37,231	34,177	35,996	41,807	47,819
MUSH	28,901	28,539	28,249	27,843	28,009
Total	**66,175**	**62,716**	**64,246**	**69,650**	**75,827**
Dividend and other Income					
Canadian Equities	9,139	9,204	9,349	9,521	10,376
US Equities	4,394	4,939	4,961	5,088	5,534
Investment Properties (CityPlace)	3,431	2,149	4,952	4,873	4,771
Infrastructure	1,268	1,721	1,828	1,931	2,039
Total	**18,232**	**18,013**	**21,090**	**21,412**	**22,720**
Gains During Period - Profit & Loss					
Marketable Bonds Unrealized Gains/(Loss)	91	(50,853)	(82,240)	(48,124)	(30,791)
Marketable Bonds Realized Gains/(Loss)	4,359	(11,787)	(17,240)	(9,396)	(5,416)
MUSH	(8,180)	(7,731)	(3,448)	1,427	3,871
Amortization of Bond Premium/Discount	0	0	0	0	0
Canadian Equities Realized Gains	11,004	8,263	10,176	7,799	6,794
US Equities Realized Gains	6,976	2,924	5,615	2,208	0
Real Estate	12,618	14,271	14,667	15,547	16,480
Infrastructure	4,971	6,740	7,164	7,566	7,989
Total	**31,839**	**(38,173)**	**(65,306)**	**(22,973)**	**(1,073)**
Other					
Investment Fees Paid	(4,449)	(4,620)	(4,733)	(4,971)	(5,256)
Pension Expense	(14,401)	(15,071)	(15,763)	(16,483)	(17,235)
Venture Capital Income					
Investment Write-Down	(18,850)	(19,691)	(20,496)	(21,454)	(22,491)
Total Investment Income	**97,396**	**22,865**	**(467)**	**46,634**	**74,983**
Basic Allocation Investment Income	83,241	19,367	(391)	38,444	60,891
Basic Allocation	85.5%	84.7%	83.6%	82.4%	81.2%

2017 GRA - 2.0% Rate Change - Interest Rate Forecast of Banks Only

	2016/17	2017/18	2018/19	2019/20	2020/21
			Forecasted		
Interest Income During Period					
Cash/Short Term Investments	42	0	0	0	0
Marketable Bonds	37,248	34,405	36,560	42,538	49,459
MUSH	28,903	28,561	28,317	28,226	28,478
Total	**66,193**	**62,966**	**64,876**	**70,764**	**77,937**
Dividend and other Income					
Canadian Equities	9,139	9,281	9,673	10,433	11,626
US Equities	4,394	4,976	5,110	5,508	6,109
Investment Properties (CityPlace)	3,431	2,149	4,952	4,873	4,771
Infrastructure	1,268	1,721	1,828	1,931	2,039
Total	**18,232**	**18,127**	**21,563**	**22,744**	**24,546**
Gains During Period - Profit & Loss					
Marketable Bonds Unrealized Gains/(Loss)	(5,545)	(49,722)	(93,210)	(43,406)	(35,065)
Marketable Bonds Realized Gains/(Loss)	3,242	(11,493)	(19,356)	(8,285)	(6,071)
MUSH	(8,094)	(7,400)	(2,995)	2,229	4,889
Amortization of Bond Premium/Discount	0	0	0	0	0
Canadian Equities Realized Gains	11,004	8,035	9,696	6,734	7,504
US Equities Realized Gains	6,976	2,553	4,712	0	0
Real Estate	12,618	14,271	14,667	15,547	16,480
Infrastructure	4,971	6,740	7,164	7,566	7,989
Total	**25,173**	**(37,016)**	**(79,321)**	**(19,615)**	**(4,275)**
Other					
Investment Fees Paid	(4,449)	(4,620)	(4,733)	(4,971)	(5,256)
Pension Expense	(14,401)	(15,071)	(15,763)	(16,483)	(17,235)
Venture Capital Income					
Investment Write-Down	(18,850)	(19,691)	(20,496)	(21,454)	(22,491)
Total Investment Income	**90,748**	**24,386**	**(13,378)**	**52,439**	**75,716**
Basic Allocation Investment Income	77,560	20,687	(11,222)	43,446	61,917
Basic Allocation	85.5%	84.8%	83.9%	82.9%	81.8%

2017 GRA - 2.0% Rate Change - Interest Rate Forecast of Banks Only, Excluding Highest

	2016/17	2017/18	2018/19	2019/20	2020/21
			Forecasted		
Interest Income During Period					
Cash/Short Term Investments	42	0	0	0	0
Marketable Bonds	37,231	34,224	36,108	41,435	47,809
MUSH	28,901	28,539	28,265	28,260	28,466
Total	**66,175**	**62,763**	**64,373**	**69,695**	**76,275**
Dividend and other Income					
Canadian Equities	9,139	9,264	9,698	10,454	11,638
US Equities	4,394	4,968	5,121	5,518	6,115
Investment Properties (CityPlace)	3,431	2,149	4,952	4,873	4,771
Infrastructure	1,268	1,721	1,828	1,931	2,039
Total	**18,232**	**18,102**	**21,599**	**22,775**	**24,562**
Gains During Period - Profit & Loss					
Marketable Bonds Unrealized Gains/(Loss)	91	(50,927)	(82,387)	(47,840)	(30,918)
Marketable Bonds Realized Gains/(Loss)	4,359	(11,804)	(17,279)	(9,324)	(5,456)
MUSH	(8,180)	(7,740)	(3,490)	1,501	3,801
Amortization of Bond Premium/Discount	0	0	0	0	0
Canadian Equities Realized Gains	11,004	8,094	9,502	6,763	7,530
US Equities Realized Gains	6,976	2,648	4,425	0	0
Real Estate	12,618	14,271	14,667	15,547	16,480
Infrastructure	4,971	6,740	7,164	7,566	7,989
Total	**31,839**	**(38,719)**	**(67,398)**	**(25,787)**	**(574)**
Other					
Investment Fees Paid	(4,449)	(4,620)	(4,733)	(4,971)	(5,256)
Pension Expense	(14,401)	(15,071)	(15,763)	(16,483)	(17,235)
Venture Capital Income					
Investment Write-Down	(18,850)	(19,691)	(20,496)	(21,454)	(22,491)
Total Investment Income	**97,396**	**22,454**	**(1,922)**	**45,228**	**77,772**
Basic Allocation Investment Income	83,241	19,049	(1,612)	37,472	63,602
Basic Allocation	85.5%	84.8%	83.9%	82.9%	81.8%

2017 GRA - 0.0% Rate Change - Interest Rate Forecast of Banks Forecast, naïve

	2016/17	2017/18	2018/19	2019/20	2020/21
			Forecasted		
Interest Income During Period					
Cash/Short Term Investments	42	0	0	(0)	(0)
Marketable Bonds	37,248	34,357	36,311	40,810	46,491
MUSH	28,903	28,561	28,299	28,001	28,071
Total	**66,193**	**62,918**	**64,610**	**68,811**	**74,563**
Dividend and other Income					
Canadian Equities	9,139	9,221	9,318	9,889	10,343
US Equities	4,394	4,947	4,946	5,258	5,519
Investment Properties (CityPlace)	3,431	2,149	4,952	4,873	4,771
Infrastructure	1,268	1,721	1,828	1,931	2,039
Total	**18,232**	**18,038**	**21,045**	**21,950**	**22,672**
Gains During Period - Profit & Loss					
Marketable Bonds Unrealized Gains/(Loss)	(5,545)	(49,650)	(71,498)	(32,050)	(23,827)
Marketable Bonds Realized Gains/(Loss)	3,242	(11,477)	(15,050)	(6,326)	(4,295)
MUSH	(8,094)	(7,391)	(3,304)	611	2,481
Amortization of Bond Premium/Discount	0	0	0	0	0
Canadian Equities Realized Gains	11,004	8,205	10,388	6,437	8,963
US Equities Realized Gains	6,976	2,829	5,930	0	3,081
Real Estate	12,618	14,271	14,667	15,547	16,480
Infrastructure	4,971	6,740	7,164	7,566	7,989
Total	**25,173**	**(36,473)**	**(51,702)**	**(8,215)**	**10,873**
Other					
Investment Fees Paid	(4,449)	(4,620)	(4,733)	(4,971)	(5,256)
Pension Expense	(14,401)	(15,071)	(15,763)	(16,483)	(17,235)
Venture Capital Income					
Investment Write-Down	(18,850)	(19,691)	(20,496)	(21,454)	(22,491)
Total Investment Income	**90,748**	**24,793**	**13,455**	**61,092**	**85,616**
Basic Allocation Investment Income	77,560	20,999	11,253	50,368	69,525
Basic Allocation	85.5%	84.7%	83.6%	82.4%	81.2%

2017 GRA - 0.0% Rate Change - Interest Rate Forecast of Banks Forecast, naïve. Excluding highest Bank Forecast

	2016/17	2017/18	2018/19	2019/20	2020/21
			Forecasted		
Interest Income During Period					
Cash/Short Term Investments	42	(0)	0	0	(0)
Marketable Bonds	37,231	34,177	35,914	39,777	45,027
MUSH	28,901	28,539	28,256	28,116	28,131
Total	**66,175**	**62,716**	**64,170**	**67,893**	**73,158**
Dividend and other Income					
Canadian Equities	9,139	9,204	9,316	9,861	10,260
US Equities	4,394	4,939	4,945	5,245	5,481
Investment Properties (CityPlace)	3,431	2,149	4,952	4,873	4,771
Infrastructure	1,268	1,721	1,828	1,931	2,039
Total	**18,232**	**18,013**	**21,041**	**21,910**	**22,551**
Gains During Period - Profit & Loss					
Marketable Bonds Unrealized Gains/(Loss)	91	(50,853)	(61,704)	(32,967)	(21,463)
Marketable Bonds Realized Gains/(Loss)	4,359	(11,787)	(13,174)	(6,709)	(3,998)
MUSH	(8,180)	(7,731)	(3,774)	(377)	1,590
Amortization of Bond Premium/Discount	0	0	0	0	0
Canadian Equities Realized Gains	11,004	8,263	10,283	6,439	9,121
US Equities Realized Gains	6,976	2,924	5,789	0	3,358
Real Estate	12,618	14,271	14,667	15,547	16,480
Infrastructure	4,971	6,740	7,164	7,566	7,989
Total	**31,839**	**(38,173)**	**(40,748)**	**(10,501)**	**13,077**
Other					
Investment Fees Paid	(4,449)	(4,620)	(4,733)	(4,971)	(5,256)
Pension Expense	(14,401)	(15,071)	(15,763)	(16,483)	(17,235)
Venture Capital Income					
Investment Write-Down	(18,850)	(19,691)	(20,496)	(21,454)	(22,491)
Total Investment Income	**97,396**	**22,865**	**23,967**	**57,847**	**86,294**
Basic Allocation Investment Income	83,241	19,367	20,046	47,693	70,082
Basic Allocation	85.5%	84.7%	83.6%	82.4%	81.2%

2017 GRA - 2.0% Rate Change - Interest Rate Forecast of Banks Forecast, naïve

	2016/17	2017/18	2018/19	2019/20	2020/21
			Forecasted		
Interest Income During Period					
Cash/Short Term Investments	42	(0)	(0)	0	0
Marketable Bonds	37,248	34,405	36,429	41,196	46,571
MUSH	28,903	28,561	28,305	28,257	28,353
Total	**66,193**	**62,966**	**64,734**	**69,453**	**74,924**
Dividend and other Income					
Canadian Equities	9,139	9,281	9,668	10,404	11,582
US Equities	4,394	4,976	5,107	5,495	6,089
Investment Properties (CityPlace)	3,431	2,149	4,952	4,873	4,771
Infrastructure	1,268	1,721	1,828	1,931	2,039
Total	**18,232**	**18,127**	**21,556**	**22,702**	**24,481**
Gains During Period - Profit & Loss					
Marketable Bonds Unrealized Gains/(Loss)	(5,545)	(49,722)	(71,666)	(32,343)	(23,896)
Marketable Bonds Realized Gains/(Loss)	3,242	(11,493)	(15,099)	(6,390)	(4,308)
MUSH	(8,094)	(7,400)	(3,380)	585	2,483
Amortization of Bond Premium/Discount	0	0	0	0	0
Canadian Equities Realized Gains	11,004	8,035	9,714	6,727	7,491
US Equities Realized Gains	6,976	2,553	4,740	0	0
Real Estate	12,618	14,271	14,667	15,547	16,480
Infrastructure	4,971	6,740	7,164	7,566	7,989
Total	**25,173**	**(37,016)**	**(53,860)**	**(8,309)**	**6,239**
Other					
Investment Fees Paid	(4,449)	(4,620)	(4,733)	(4,971)	(5,256)
Pension Expense	(14,401)	(15,071)	(15,763)	(16,483)	(17,235)
Venture Capital Income					
Investment Write-Down	(18,850)	(19,691)	(20,496)	(21,454)	(22,491)
Total Investment Income	**90,748**	**24,386**	**11,934**	**62,391**	**83,152**
Basic Allocation Investment Income	77,560	20,687	10,012	51,696	68,006
Basic Allocation	85.5%	84.8%	83.9%	82.9%	81.8%

2017 GRA - 2.0% Rate Change - Interest Rate Forecast of Banks Forecast, naïve. Excluding highest Bank Forecast

	2016/17	2017/18	2018/19	2019/20	2020/21
			Forecasted		
Interest Income During Period					
Cash/Short Term Investments	42	0	0	0	0
Marketable Bonds	37,231	34,224	36,035	40,298	45,190
MUSH	28,901	28,539	28,256	28,144	28,164
Total	**66,175**	**62,763**	**64,290**	**68,442**	**73,354**
Dividend and other Income					
Canadian Equities	9,139	9,264	9,667	10,408	11,581
US Equities	4,394	4,968	5,107	5,497	6,088
Investment Properties (CityPlace)	3,431	2,149	4,952	4,873	4,771
Infrastructure	1,268	1,721	1,828	1,931	2,039
Total	**18,232**	**18,102**	**21,554**	**22,708**	**24,479**
Gains During Period - Profit & Loss					
Marketable Bonds Unrealized Gains/(Loss)	91	(50,927)	(61,847)	(33,337)	(21,504)
Marketable Bonds Realized Gains/(Loss)	4,359	(11,804)	(13,213)	(6,784)	(4,008)
MUSH	(8,180)	(7,740)	(3,823)	(383)	1,586
Amortization of Bond Premium/Discount	0	0	0	0	0
Canadian Equities Realized Gains	11,004	8,094	9,610	6,732	7,496
US Equities Realized Gains	6,976	2,648	4,599	0	0
Real Estate	12,618	14,271	14,667	15,547	16,480
Infrastructure	4,971	6,740	7,164	7,566	7,989
Total	**31,839**	**(38,719)**	**(42,843)**	**(10,659)**	**8,039**
Other					
Investment Fees Paid	(4,449)	(4,620)	(4,733)	(4,971)	(5,256)
Pension Expense	(14,401)	(15,071)	(15,763)	(16,483)	(17,235)
Venture Capital Income					
Investment Write-Down	(18,850)	(19,691)	(20,496)	(21,454)	(22,491)
Total Investment Income	**97,396**	**22,454**	**22,505**	**59,037**	**83,381**
Basic Allocation Investment Income	83,241	19,049	18,881	48,916	68,190
Basic Allocation	85.5%	84.8%	83.9%	82.9%	81.8%

2017 GRA - 0.0% Rate Change - Interest Rate Forecast using average of PUB 2-7 (c)3 and (e)3 scenarios

	2016/17	2017/18	2018/19	2019/20	2020/21
			Forecasted		
Interest Income During Period					
Cash/Short Term Investments	42	0	0	0	0
Marketable Bonds	37,248	34,357	36,374	41,542	47,929
MUSH	28,903	28,561	28,291	27,849	28,003
Total	**66,193**	**62,918**	**64,665**	**69,391**	**75,931**
Dividend and other Income					
Canadian Equities	9,139	9,221	9,330	9,933	10,434
US Equities	4,394	4,947	4,952	5,278	5,561
Investment Properties (CityPlace)	3,431	2,149	4,952	4,873	4,771
Infrastructure	1,268	1,721	1,828	1,931	2,039
Total	**18,232**	**18,038**	**21,062**	**22,014**	**22,804**
Gains During Period - Profit & Loss					
Marketable Bonds Unrealized Gains/(Loss)	(5,545)	(49,650)	(82,340)	(37,707)	(29,587)
Marketable Bonds Realized Gains/(Loss)	3,242	(11,477)	(17,209)	(7,283)	(5,205)
MUSH	(8,094)	(7,391)	(3,192)	1,507	3,719
Amortization of Bond Premium/Discount	0	0	0	0	0
Canadian Equities Realized Gains	11,004	8,205	10,354	6,450	8,841
US Equities Realized Gains	6,976	2,829	5,875	0	2,841
Real Estate	12,618	14,271	14,667	15,547	16,480
Infrastructure	4,971	6,740	7,164	7,566	7,989
Total	**25,173**	**(36,473)**	**(64,681)**	**(13,920)**	**5,077**
Other					
Investment Fees Paid	(4,449)	(4,620)	(4,733)	(4,971)	(5,256)
Pension Expense	(14,401)	(15,071)	(15,763)	(16,483)	(17,235)
Venture Capital Income					
Investment Write-Down	(18,850)	(19,691)	(20,496)	(21,454)	(22,491)
Total Investment Income	**90,748**	**24,793**	**550**	**56,030**	**81,322**
Basic Allocation Investment Income	77,560	20,999	460	46,194	66,038
Basic Allocation	85.5%	84.7%	83.6%	82.4%	81.2%

2017 GRA - 2.0% Rate Change - Interest Rate Forecast using average of PUB 2-7 (c)3 and (e)3 scenarios

	2016/17	2017/18	2018/19	2019/20	2020/21
			Forecasted		
Interest Income During Period					
Cash/Short Term Investments	42	0	0	0	0
Marketable Bonds	37,248	34,405	36,494	41,818	47,952
MUSH	28,903	28,561	28,311	28,313	28,503
Total	**66,193**	**62,966**	**64,805**	**70,131**	**76,455**
Dividend and other Income					
Canadian Equities	9,139	9,281	9,671	10,409	11,592
US Equities	4,394	4,976	5,109	5,497	6,094
Investment Properties (CityPlace)	3,431	2,149	4,952	4,873	4,771
Infrastructure	1,268	1,721	1,828	1,931	2,039
Total	**18,232**	**18,127**	**21,559**	**22,709**	**24,495**
Gains During Period - Profit & Loss					
Marketable Bonds Unrealized Gains/(Loss)	(5,545)	(49,722)	(82,557)	(38,003)	(29,667)
Marketable Bonds Realized Gains/(Loss)	3,242	(11,493)	(17,255)	(7,341)	(5,221)
MUSH	(8,094)	(7,400)	(3,205)	1,516	3,719
Amortization of Bond Premium/Discount	0	0	0	0	0
Canadian Equities Realized Gains	11,004	8,035	9,705	6,729	7,494
US Equities Realized Gains	6,976	2,553	4,726	0	0
Real Estate	12,618	14,271	14,667	15,547	16,480
Infrastructure	4,971	6,740	7,164	7,566	7,989
Total	**25,173**	**(37,016)**	**(66,754)**	**(13,987)**	**794**
Other					
Investment Fees Paid	(4,449)	(4,620)	(4,733)	(4,971)	(5,256)
Pension Expense	(14,401)	(15,071)	(15,763)	(16,483)	(17,235)
Venture Capital Income					
Investment Write-Down	(18,850)	(19,691)	(20,496)	(21,454)	(22,491)
Total Investment Income	**90,748**	**24,386**	**(886)**	**57,399**	**79,253**
Basic Allocation Investment Income	77,560	20,687	(743)	47,556	64,813
Basic Allocation	85.5%	84.8%	83.9%	82.9%	81.8%

Financial Forecasting Model Interest Rate Scenario Summary

(C$millions, unless otherwise stated)

Reference	Scenario Name	Item	2016/17	2017/18	2018/19	2019/20	2020/21	Avg Net Inc. for Rating Years	Rate Change Estimate for break even
0% Rate Change									
GRA - Base	1. March 2016 Standard Forecast	Net Income	(18.7)	(17.9)	(7.9)	(17.9)	(22.7)	(12.9)	2.00%
	2017 GRA, 0% Rate Change	Total Equity	217.1	220.5	236.4	250.8	265.4		
PUB1-16 a	1A. July 2016 Standard Forecast	Net Income	(32.3)	(33.1)	10.6	(22.7)	(26.1)	(11.2)	1.70%
	0% Rate Change	Total Equity	199.4	168.2	171.1	159.6	143.6		
PUB2-7 b	1B. August 2016 Standard Forecast	Net Income	(33.1)	(32.6)	9.7	(22.5)	(26.6)	(11.5)	1.76%
	0% Rate Change	Total Equity	198.5	167.2	169.6	158.3	141.7		
PUB2-7 c1	4. August 2016 Bank Only	Net Income	(32.0)	(35.5)	(11.2)	(25.3)	(16.2)	(23.3)	3.50%
	0% Rate Change	Total Equity	199.9	166.0	154.2	138.8	130.6		
PUB2-7 c2	4A. August 2016 Bank Only Excl. Highest	Net Income	(33.1)	(35.8)	(15.9)	(22.2)	(26.1)	(25.9)	3.83%
	0% Rate Change	Total Equity	198.4	164.1	147.3	131.9	116.8		
PUB2-7 e1	5. August 2016 Bank Only Naïve	Net Income	(32.0)	(35.5)	(17.2)	(31.5)	(24.3)	(26.3)	3.86%
	0% Rate Change	Total Equity	199.9	166.0	146.7	124.4	106.4		
PUB2-7 e2	5A. August 2016 Bank Only Naïve Excl. Highest	Net Income	(33.1)	(35.8)	(21.1)	(33.9)	(27.0)	(28.5)	4.13%
	0% Rate Change	Total Equity	198.4	164.1	140.5	115.6	94.3		
PUB2-7 f1	6. Average Interest Rate Of 4 and 5	Net Income	(32.0)	(35.1)	(14.9)	(27.4)	(21.4)	(25.0)	3.68%
	0% Rate Change	Total Equity	199.9	166.4	150.3	132.5	118.2		
2.0% Rate Change									
PUB2-7 c3	7. August 2016 Bank Only	Net Income	(32.0)	(25.7)	4.9	(3.5)	1.9	(10.4)	2.0% + 1.51%
	2% Rate Change	Total Equity	199.9	184.7	191.2	198.7	213.5		
PUB2-7 c4	7A. August 2016 Bank Only Excl. Highest	Net Income	(33.1)	(26.0)	0.8	(5.1)	(1.8)	(12.6)	2.0% + 1.83%
	2% Rate Change	Total Equity	198.4	182.8	184.9	191.0	201.8		
PUB2-7 e3	8. August 2016 Bank Only Naïve	Net Income	(32.0)	(25.7)	(0.1)	(9.8)	(6.8)	(12.9)	2.0% + 1.86%
	2% Rate Change	Total Equity	199.9	184.7	184.7	185.1	190.3		
PUB2-7 e4	8A. August 2016 Bank Only Naïve Excl. Highest	Net Income	(33.1)	(26.0)	(3.5)	(12.1)	(10.3)	(14.8)	2.0% + 2.13%
	2% Rate Change	Total Equity	198.4	182.8	179.0	177.1	178.7		
PUB2-7 f2	9. Average Interest Rate Of 7 and 8	Net Income	(32.0)	(25.7)	2.3	(6.8)	(2.2)	(11.7)	2.0% + 1.69%
	2% Rate Change	Total Equity	199.9	184.7	187.9	191.7	201.9		

PUB (MPI) 2-8

Volume:	PUB/MPI 1-18	Page No.:	
Topic:	Investment Income		
Sub Topic:			
Issue:	ALM Strategy		

Question:

a) Please explain the factors that result in the changes in the Basic net impact in each of the years 2014/15 through 2019/20 for a -100 basis point change in interest rates.

b) Please provide a schedule of recent historical financial results that demonstrates the mitigation of interest rate risk by implemented changes to the ALM strategy at both the Corporate and Basic level.

c) Provide a comparison between the filed Pro Formas (PF.1, PF.2 & PF.3) and revised Pro-Formas, reflecting full reversal of the implementation of the ALM strategy and provide commentary.

d) Please provide the results of the DCAT interest rate decline scenarios with and without the implementation of the ALM program.

Rationale for Question:

To demonstrate the changed interest rate risk exposure to Basic.

RESPONSE:

a) The net impact shown represents interest rate risk, which is the net impact of changes in interest rates on claims and the gain/loss for marketable bonds. For the historical years, the impact was measured as of February 28/29 for each fiscal year. For the forecasted years, the impact was measured in the last fiscal quarter of each year within the model.

For 2015/16, 2016/17, 2018/19, 2019/20 and 2020/21 the net impacts are within +/- $10 million for a 100 bps change in interest rates. This level of impact is deemed reasonable for a large interest rate decline.

There were two years that require additional commentary:

- 2014/15: When the marketable bond yield falls by 100 bps, the claims discount rate hits a floor of 2.77%. The discount rate was only allowed to fall an additional 15 bps from base.

- 2017/18: When interest rates fall 100 bps the real claims discount rate after margin is below 0.50%. With the discount rate so low, the impacts to claims incurred are no longer linear as a result of convexity. However, in the same year marketable bond gain/loss are not as affected by convexity. This 'lag' causes a slight gap in the net impact which resolves itself as the interest rates increase over time.

b) Please see *Volume II INV.1.2.1 Table 1.2.1.2* titled "Basic Investment and Claims Net Interest Rate Impact" and the last line "Net Impact of Changes to Interest Rates". Basic interest rate risk was significantly higher on a historical basis compared to the forecasted years (2016/17 to 2020/21) for a similar level of change in interest rates.

To illustrate, the net impact in 2014/15 was $36.8 million when the marketable bond yield changed by 0.53%. This impact occurred prior to the implementation of the current Asset Liability Management (ALM) strategy. In 2016/17, the marketable bond yield is forecasted to change by a comparable 0.52%. The impact in 2016/17 was $16.1 million, $20.7 million lower than the $36.8 million impact in 2014/15.

As a second example, the duration gap target in 2011/12 was +/- 2.0 years. The marketable bond yield changed by 0.31%, and the impact was $26.6 million. In 2018/19 the marketable bond yield is forecasted to change by 0.79%, which is 155% larger than the 0.31% change in 2011/12. However, the 2018/19 impact was still significantly smaller compared to 2011/12 ($17.1 million versus $26.6 million).

c) Please see Attachment A for the revised Pro Formas for the full reversal of the ALM study and a comparison.

Assumptions for Reverse ALM Scenario

Three assumptions were changed in order to forecast a full reversal of the implementation of the Asset Liability Management (ALM) strategy. These changes were applied over the five year forecast in the base 2017 GRA model with a 2.0% rate change.

1. The 2016 and 2017 GRA base forecast dollar matched the fixed income portfolio to the claims liabilities. To reverse the ALM strategy, rebalancing assumptions from the 2015 GRA were used. A summary of these rebalancing assumptions from the 2015 GRA are in the table below.

Table 1 Summary of Rebalancing Assumptions by Asset Class

Cash	Minimum of $25 million in cash, maximum allocation of 3% of the total portfolio.
Marketable Bonds	When marketable bonds remain outside the tolerance range for two consecutive quarters, the asset class will be adjusted to the target weight in the following quarter. Canadian equities receive 75% of the inflows or outflows from the rebalancing. U.S. equities receive 25% of the inflows or outflows from the rebalancing.
MUSH	MUSH bonds are an illiquid asset class, so there is no rebalancing assumption with other asset classes. New MUSH purchases on a quarterly basis are adjusted to ensure that MUSH remains within the tolerance range of 15% to 25%.
Canadian and US Equities	When the asset class remains outside the maximum or minimum allocation limit for two consecutive quarters, then the asset class will be adjusted to the target weight in the following quarter. Inflows or outflows required for rebalancing will come from marketable bonds.
Real Estate and Infrastructure	The forecasted real estate and infrastructure values do not fall outside of their respective tolerance ranges during the five year forecast.

2. The duration gap was assumed to be -1.0 years without PfAD, which is the same assumption used in the 2015 GRA. For reference, the 2017 GRA assumption is 0.0 duration gap with PfAD.

3. The asset allocation and tolerance ranges used in the 2015 GRA were used.

Commentary:

- The decision to change the ALM strategy occurred 1.5 years ago.

- This "Full Reversal of the ALM Implementation" scenario is completed over the short-term (5 year forecast) and does not consider the ongoing impact that interest rate risk will have beyond that (beyond 5 years).

- A negative duration gap causes the marketable bond duration to fall from 12.5 years to 8.6 years in the first three years. This is a 3.9 year decrease in duration, which is a large decrease on a percentage basis (-31.2%).

    - Lower duration bonds are assumed to have a lower yield. As a result, the duration yield spread used when calculating the marketable bond yield falls by 52 bps by the end of the third year.

    - The lower marketable bond yield decreases the claims discount rate. A lower claims discount rate causes the claims liabilities to increase in value, negatively impacting net income.

    - This claims side impact is not offset by a change in the marketable bond market value because selling higher duration bonds and purchasing lower duration bonds does not impact marketable gain/loss and net income.

- Increasing the duration gap from 0.0 to -1.0 years does have a positive impact to basic net income with a rising interest rate forecast.

- Average basic net income over the rating years was $13.7 million higher compared to 2017 GRA base scenario with a 2.0% rate increase.

- Part of the increase in net income over the rating years relative to base was caused by a $12.9 million dollar realization of U.S. equity gains (Basic) in 2017/18.

- This "Full Reversal of the ALM Implementation" scenario is heavily impacted by assumptions because the investment portfolio has to transition to a Pre-ALM state in the first year of the forecast. Caution must be exercised when drawing conclusions from this scenario.

d) The results of the Interest Rate Decline scenarios with the implementation of the ALM strategy can be found in *Volume II RSR.2 DCAT page 43*. The table below shows the projected Total Equity for each of the Interest Rate Decline scenarios without the implementation of the ALM strategy. Note that the Base scenario will have changed as well.

Table 2 Interest Rate Decline Scenario without ALM Strategy
Total Equity (in millions)

Probability	Return Period	2017/18	2018/19	2019/20	2020/21
1-in-200	1 year + base	$158	$122	$88	$47
1-in-100	1 year + base	$158	$122	$88	$47
1-in-40	1 year + base	$158	$122	$88	$47
1-in-20	1 year + base	$158	$130	$97	$60
1-in-200	2 year + base	$158	$122	$88	$47
1-in-100	2 year + base	$158	$122	$88	$47
1-in-40	2 year + base	$158	$122	$88	$47
1-in-20	2 year + base	$158	$122	$88	$47
1-in-200	3 year + base	$158	$122	$88	$47
1-in-100	3 year + base	$158	$122	$88	$47
1-in-40	3 year + base	$158	$122	$88	$47
1-in-20	3 year + base	$158	$122	$88	$47
1-in-200	4 year	$158	$122	$88	$47
1-in-100	4 year	$158	$122	$88	$47
1-in-40	4 year	$158	$122	$88	$47
1-in-20	4 year	$158	$122	$88	$47
Base		$208	$223	$232	$242

Difference from Base	2017/18	2018/19	2019/20	2020/21
1-in-40, 1 year	($49)			
1-in-40, 2 year	($49)	($100)		
1-in-40, 3 year	($49)	($100)	($144)	
1-in-40, 4 year	($49)	($100)	($144)	($195)

PF.1 STATEMENT OF OPERATIONS

Manitoba Public Insurance
Multi-year - Statement of Operations

2017 GRA - 2.00% Rate Change with Full reversal of ALM Implementation
(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Motor Vehicles	893,420	954,331	997,909	1,044,039	1,092,429
Drivers	50,393	52,908	55,180	57,424	59,626
Reinsurance Ceded	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Written	**932,181**	**995,363**	**1,040,975**	**1,089,107**	**1,139,452**
Net Premiums Earned					
Motor Vehicles	875,348	926,228	977,803	1,022,756	1,070,103
Drivers	48,478	51,645	54,039	56,298	58,521
Reinsurance Ceded	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Earned	**912,194**	**965,997**	**1,019,728**	**1,066,698**	**1,116,021**
Service Fees & Other Revenues	21,557	23,227	24,999	26,965	28,881
Total Earned Revenues	**933,751**	**989,224**	**1,044,727**	**1,093,663**	**1,144,902**
Net Claims Incurred	763,137	795,170	838,523	875,754	916,727
(a) Claims Incurred - Interest Rate Impact	(70,959)	(80,805)	(72,378)	(554)	(3,728)
Total Claims Incurred	**692,178**	**714,365**	**766,145**	**875,200**	**912,999**
Claims Expense	125,191	128,318	132,746	140,613	147,878
Road Safety/Loss Prevention	13,318	13,210	14,075	14,077	14,216
Total Claims Costs	**830,687**	**855,893**	**912,966**	**1,029,890**	**1,075,093**
Expenses					
Operating	76,908	78,026	82,306	83,309	88,117
Commissions	35,616	37,376	39,402	41,152	42,988
Premium Taxes	27,715	29,336	30,955	32,372	33,859
Regulatory/Appeal	3,421	3,494	3,566	3,641	3,718
Total Expenses	**143,660**	**148,232**	**156,229**	**160,474**	**168,682**
Underwriting Income (Loss)	**(40,596)**	**(14,901)**	**(24,468)**	**(96,701)**	**(98,873)**
Investment Income	69,924	89,567	83,818	93,801	99,676
(b) Investment Income - Interest Rate Impact	(52,603)	(53,023)	(61,611)	(5,847)	(0)
Net Investment Income	**17,321**	**36,544**	**22,207**	**87,954**	**99,676**
Net Income (Loss) from Operations for Rate Setting	**(27,555)**	**14,191**	**(1,556)**	**(9,517)**	**(1,645)**
Add: DPAC / Premium Deficiency adjustment	(4,280)	(7,452)	705	(770)	(2,448)
Net Income (Loss)	**(23,275)**	**21,643**	**(2,261)**	**(8,747)**	**803**
Total net Impact due to interest rate change (b) - (a)	**18,356**	**27,782**	**10,767**	**(5,293)**	**3,728**

PF.2 STATEMENT OF FINANCIAL POSITION

Manitoba Public Insurance
Multi-year - Statement of Financial Position

2017 GRA - 2.00% Rate Change with Full reversal of ALM Implementation
(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Assets					
Cash and cash equivalents	31,596	31,231	31,866	32,502	32,763
Investments	2,131,532	2,145,108	2,162,989	2,250,485	2,357,232
Investment property	40,390	40,879	41,074	41,619	42,682
Accounts receivable	302,393	320,560	333,844	347,885	362,545
Deferred policy acquisition costs	6,421	15,626	16,175	18,272	22,112
Property and equipment	86,248	88,863	90,183	90,345	91,720
Deferred development costs	70,462	77,341	79,991	81,701	64,385
	2,669,042	**2,719,608**	**2,756,122**	**2,862,809**	**2,973,439**
Liabilities					
Due to other insurance companies	113	113	113	113	113
Accounts payable and accrued liabilities	29,447	30,993	31,499	32,418	33,959
Financing lease obligation	2,968	2,899	2,825	2,752	2,678
Unearned premiums and fees	475,671	508,213	532,903	559,044	586,519
Provision for employee current benefits	16,527	16,880	17,244	17,616	17,999
Provision for employee future benefits	286,836	302,414	319,313	336,739	354,910
Provision for unpaid claims	1,640,298	1,625,780	1,615,023	1,672,804	1,725,441
	2,451,860	**2,487,292**	**2,518,920**	**2,621,486**	**2,721,619**
Equity					
Retained earnings	171,221	192,864	190,605	181,856	182,658
Basic Insurance Retained Earnings	-	-	-	-	-
Accumulated Other Comprehensive Income	47,818	41,783	49,702	58,268	67,631
Total Equity	**219,039**	**234,647**	**240,307**	**240,124**	**250,289**
Total Liabilities & Equity	**2,670,899**	**2,721,939**	**2,759,227**	**2,861,610**	**2,971,908**

Manitoba Public Insurance

PF.3 STATEMENT OF CHANGES IN EQUITY

Manitoba Public Insurance
Multi-year - Statement of Changes in Equity

2017 GRA - 2.00% Rate Change with Full reversal of ALM Implementation
(C$ 000s, rounding may affect totals)

	2017B	2018F	2019F	2020F	2021F
BASIC					
Retained Earnings					
Beginning Balance	194,497	171,221	192,864	190,605	181,856
Net Income (Loss) from annual operations	(23,275)	21,643	(2,260)	(8,748)	802
Premium Rebate	0	0	0	0	0
Transfer (to) / from Non-Basic Retained Earnings	0	0	0	0	0
Total Retained Earnings	**171,221**	**192,864**	**190,605**	**181,856**	**182,658**
Retained Earnings					
Equity Reserve	171,221	192,864	190,605	181,856	182,658
Excess Retained Earnings	0	0	0	0	0
Total Retained Earnings	171,221	192,864	190,605	181,856	182,658
Total Accumulated Other Comprehensive Income					
Beginning Balance	36,504	47,818	41,783	49,702	58,268
Other Comprehensive Income for the Year	11,314	(6,035)	7,919	8,565	9,363
Total Accumulated Other Comprehensive Income	47,818	41,783	49,702	58,268	67,631
Total Equity Balance	**219,039**	**234,647**	**240,307**	**240,124**	**250,289**
RESERVE TARGETS					
DCAT Total Equity Target	231,000	181,000	181,000	181,000	181,000
MCT Total Equity Target	366,000	404,000	404,000	404,000	404,000

Manitoba Public Insurance

PF-4 Manitoba Public Insurance
Statement of Operations - 2016/17 Comparative

(C$ 000s, rounding may affect totals)	2017 GRA Filed 2017B	ALM Reversal 2017B	Inc (dec)	Ref.	Increase / (Decrease)
	$	$	$		%
Net Premiums Written					
Motor Vehicles	893,420	893,420	-		-
Drivers	50,393	50,393	-		-
Reinsurance Ceded	(11,632)	(11,632)	-		-
Total Net Premiums Written	**932,181**	**932,181**	**-**		-
Net Premiums Earned					
Motor Vehicles	875,348	875,348	-		-
Drivers	48,478	48,478	-		-
Reinsurance Ceded	(11,632)	(11,632)	-		-
Total Net Premiums Earned	**912,194**	**912,194**	**-**		-
Service Fees & Other Revenues	21,557	21,557	-		-
Total Earned Revenues	**933,751**	**933,751**	**-**		-
	-	-			
Net Claims Incurred	762,626	763,137	511		0.07
(a) Claims Incurred - Interest rate impact	(80,856)	(70,959)	9,897		(12.24)
Total Claims Incurred	681,770	692,178	10,408		1.53
Claims Expense	125,191	125,191	-		-
Road Safety/Loss Prevention	13,318	13,318	-		-
Total Claims Costs	**820,279**	**830,687**	**10,408**		1.27
Expenses					
Operating	76,908	76,908	-		-
Commissions	35,616	35,616	-		-
Premium Taxes	27,715	27,715	-		-
Regulatory/Appeal	3,421	3,421	-		-
Total Expenses	**143,660**	**143,660**	**-**		-
Underwriting Income (Loss)	**(30,188)**	**(40,596)**	**(10,408)**		34.48
Investment Income	81,531	69,924	(11,607)		(14.24)
(b) Investment Income - Interest Rate Impact	(64,737)	(52,603)	12,134		(18.74)
Total Investment Income	16,794	17,321	527		3.14
Net Income (Loss) from Operations for Rate Setting	**(18,186)**	**(27,555)**	**(9,369)**		51.51
Total net Impact due to interest rate change (b) - (a)	**16,119**	**18,356**	**2,237**		**13.88**

Manitoba Public Insurance

PF-5 Manitoba Public Insurance
Statement of Operations - 2017/18 Comparative

(C$ 000s, rounding may affect totals)	2017 GRA Filed 2018F	ALM Reversal 2018F	Inc (dec)	Ref.	Increase /
	$	$	$		%
Net Premiums Written					
Motor Vehicles	954,331	954,331	-		-
Drivers	52,908	52,908	-		-
Reinsurance Ceded	(11,876)	(11,876)	-		-
Total Net Premiums Written	**995,363**	**995,363**	**-**		-
Net Premiums Earned					
Motor Vehicles	926,228	926,228	-		-
Drivers	51,645	51,645	-		-
Reinsurance Ceded	(11,876)	(11,876)	-		-
Total Net Premiums Earned	**965,997**	**965,997**	**-**		-
Service Fees & Other Revenues	23,227	23,227	-		-
Total Earned Revenues	**989,224**	**989,224**	**-**		-
	-	-			
Net Claims Incurred	794,701	795,170	469		0.06
(a) Claims Incurred - Interest rate impact	(84,564)	(80,805)	3,759		(4.45)
Total Claims Incurred	710,137	714,365	4,228		0.60
Claims Expense	128,312	128,318	6		0.00
Road Safety/Loss Prevention	13,210	13,210	-		-
Total Claims Costs	**851,659**	**855,893**	**4,234**		0.50
Expenses					
Operating	78,026	78,026	-		-
Commissions	37,376	37,376	-		-
Premium Taxes	29,336	29,336	-		-
Regulatory/Appeal	3,494	3,494	-		-
Total Expenses	**148,232**	**148,232**	**-**		-
Underwriting Income (Loss)	**(10,667)**	**(14,901)**	**(4,234)**		39.69
Investment Income	79,769	89,567	9,798		12.28
(b) Investment Income - Interest Rate Impact	(69,908)	(53,023)	16,885		(24.15)
Total Investment Income	9,861	36,544	26,683		270.59
Net Income (Loss) from Operations for Rate Setting	**(8,417)**	**14,191**	**22,607**		(268.61)
Total net Impact due to interest rate change (b) - (a)	**14,656**	**27,782**	**13,126**		**89.56**

PF-6 Manitoba Public Insurance
Statement of Operations - 2018/19 Comparative

(C$ 000s, rounding may affect totals)	2017 GRA Filed 2019F	ALM Reversal 2019F	Inc (dec)	Ref.	Increase /
	$	$	$		%
Net Premiums Written					
Motor Vehicles	997,909	997,909	-		-
Drivers	55,180	55,180	-		-
Reinsurance Ceded	(12,114)	(12,114)	-		-
Total Net Premiums Written	**1,040,975**	**1,040,975**	**-**		-
	-	-			
Net Premiums Earned					
Motor Vehicles	977,803	977,803	-		-
Drivers	54,039	54,039	-		-
Reinsurance Ceded	(12,114)	(12,114)	-		-
Total Net Premiums Earned	**1,019,728**	**1,019,728**	**-**		-
Service Fees & Other Revenues	24,999	24,999	-		-
Total Earned Revenues	**1,044,727**	**1,044,727**	**-**		-
	-	-			
Net Claims Incurred	836,725	838,523	1,798		0.21
(a) Claims Incurred - Interest rate impact	(97,980)	(72,378)	25,602		(26.13)
Total Claims Incurred	738,745	766,145	27,400		3.71
Claims Expense	132,737	132,746	9		0.01
Road Safety/Loss Prevention	14,075	14,075	-		-
Total Claims Costs	**885,557**	**912,966**	**27,409**		3.10
Expenses					
Operating	82,306	82,306	-		-
Commissions	39,402	39,402	-		-
Premium Taxes	30,955	30,955	-		-
Regulatory/Appeal	3,566	3,566	-		-
Total Expenses	**156,229**	**156,229**	**-**		-
Underwriting Income (Loss)	**2,941**	**(24,468)**	**(27,409)**		(931.96)
	-	**-**			
Investment Income	85,667	83,818	(1,849)		(2.16)
(b) Investment Income - Interest Rate Impact	(80,597)	(61,611)	18,986		(23.56)
Total Investment Income	5,070	22,207	17,137		338.01
Net Income (Loss) from Operations for Rate Setting	**7,318**	**(1,556)**	**(8,874)**		(121.26)
Total net Impact due to interest rate change (b) - (a)	**17,383**	**10,767**	**(6,616)**		**(38.06)**

Manitoba Public Insurance

PUB (MPI) 2-9

Volume:	**PUB/MPI 1-23**	**Page No.:**	
Topic:	**Investment Income**		
Sub Topic:			
Issue:	**Investment Properties (Cityplace)**		

Question:

a) Please file the valuation supporting the agreed-upon value for the transfer of 225 Carlton to True North Development Corporation.

b) Please provide the analysis supporting the foregone parking revenue during construction.

c) Please provide the detail and determination of the amount of the gain booked on the transaction.

d) Please provide the details of any interest payable or rights extended pursuant to the secured partnership units.

Rationale for Question:

To understand the impact of the sale of Corporate property on investment returns and rates.

RESPONSE:

a) The sale of 225 Carlton was part of the audited results of the prior year financial statements and therefore has been verified by our auditors as accurate. As the valuation was reflected in a prior year, and not the rate year of this General Rate Application, the supporting documentation does add any information pertinent to the current rating years.

b) The foregone parking revenue was based on average parking revenues for the Carlton parking lot for the timeframe that was determined to build True North Square.

c) The gain booked is based on the difference between the total value of $7.95 million and the book value, resulting in a Corporate gain on sale of investment property of $4.41 million, which was recorded in the 2015/16 audited financial statements.

d) As of August 19, 2016 there is no interest payable or rights extended pursuant to the secured partnership units. The limited partnership units were exchanged for cash equaling their book value on this date.

PUB (MPI) 2-10

Volume:	**PUB (MPI) 1-24** **II**	**Page No.:**	**RSR.1.2.3**
Topic:	**100% MCT Upper Basic Total Equity Target**		
Sub Topic:			
Issue:	**Likelihood of Outcomes to Exhaust this Level of Total Equity**		

Question:

Using the same modeling context as referenced in this response, please provide the estimated outcome percentile levels needed to exhaust the levels of Basic Total Equity corresponding to MCT ratios of 70%, 80% and 90%.

Rationale for Question:

To assess the quantitative reasonableness of the Corporation's proposed upper Basic Total Equity target.

RESPONSE:

Without management action, a 1-in-29 probability level (or 96.5th percentile) 4-year scenario will deplete the Basic Total Equity corresponding to a MCT ratio of 70%".

Without management action, a 1-in-50 probability level (or 98th percentile) 4-year scenario will deplete the Basic Total Equity corresponding to a MCT ratio of 80%".

Without management action, a 1-in-86 probability level (or 98.8th percentile) 4-year scenario will deplete the Basic Total Equity corresponding to a MCT ratio of 90%".

With management action, each of the MCT ratios of 70%, 80%, and 90% would require a scenario more adverse than the 4-year 1-in-200 scenario.

PUB (MPI) 2-11

Volume:	PUB (MPI) 1-25 II	Page No.:	RSR.2, Pages 7 and 11
Topic:	Analysis of Proposed Lower Basic Total Equity Target		
Sub Topic:	Continuation of Collaborative Process		
Issue:			

Preamble: The "*minimum Total Equity balance such that all of Combined Scenarios after assumed management action remain above zero is $181 million.*"

Question:

For each of the scenarios provided in this response, please provide the accompanying detailed scenario exhibits (for example, corresponding to the DCAT Exhibits 1a to 1g, inclusive).

Rationale for Question:

To continue the collaborative process.

RESPONSE:

Please see the attached exhibits.

Exhibit 1a
2-Year 1-in-20 Combined Modified Scenario
Statement of Operations

(C$ 000s, except where noted)	*For the Years Ended February,*							
	2014A	**2015A**	**2016A**	**2017P**	**2018P**	**2019P**	**2020P**	**2021P**
BASIC								
Motor Vehicles	756,642	794,052	854,170	893,420	954,331	1,038,966	1,086,974	1,137,336
Drivers	41,520	44,642	46,619	50,393	52,908	55,180	57,424	59,626
Reinsurance Ceded	(13,422)	(13,829)	(12,423)	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Written	**784,741**	**824,865**	**888,365**	**932,181**	**995,362**	**1,082,032**	**1,132,042**	**1,184,358**
Net Premiums Earned								
Motor Vehicles	741,077	774,784	827,701	875,348	926,228	999,917	1,064,824	1,114,100
Drivers	37,015	42,926	45,787	48,478	51,645	54,039	56,298	58,521
Reinsurance Ceded	(13,422)	(13,829)	(12,423)	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Earned	**764,671**	**803,880**	**861,065**	**912,195**	**965,997**	**1,041,843**	**1,108,765**	**1,160,017**
Service Fees & Other Revenues	20,383	19,475	20,351	21,557	23,227	24,999	27,199	29,130
Total Earned Revenues	**785,053**	**823,356**	**881,416**	**933,752**	**989,224**	**1,066,842**	**1,135,964**	**1,189,147**
Net Claims Incurred	747,435	745,837	666,404	681,770	892,278	893,385	865,903	924,613
Claims Expense	114,552	116,578	118,614	125,191	128,312	133,564	141,961	149,107
Road Safety/Loss Prevention	12,816	11,359	13,027	13,318	13,210	14,160	14,221	14,349
Total Claims Costs	**874,803**	**873,773**	**798,045**	**820,279**	**1,033,800**	**1,041,108**	**1,022,085**	**1,088,069**
Expenses								
Operating	67,982	74,283	71,641	76,908	78,026	82,758	84,055	88,806
Commissions	32,058	32,845	33,862	35,616	37,376	39,975	42,507	44,405
Premium Taxes	23,343	24,531	26,205	27,715	29,336	31,619	33,634	35,179
Regulatory/Appeal	3,766	3,935	3,675	3,421	3,494	3,567	3,643	3,720
Total Expenses	**127,148**	**135,594**	**135,383**	**143,661**	**148,232**	**157,919**	**163,838**	**172,110**
Underwriting Income (Loss)	**(216,898)**	**(186,011)**	**(52,012)**	**(30,188)**	**(192,808)**	**(132,185)**	**(49,959)**	**(71,031)**
Investment Income	147,735	188,451	(4,038)	16,794	102,142	103,415	61,165	72,247
Net Income (Loss) from Operations	**(69,163)**	**2,440**	**(56,050)**	**(18,186)**	**(86,258)**	**(36,772)**	**10,542**	**618**
DPAC / Premium Deficiency writedown Adj.	-	-	-	(4,792)	4,408	(8,003)	(664)	(598)
Net Income (Loss)	**(69,163)**	**2,440**	**(56,050)**	**(13,394)**	**(90,666)**	**(28,770)**	**11,205**	**1,216**

Exhibit 1b
2-Year 1-in-20 Combined Modified Scenario
Statement of Changes in Equity

(C$ 000s, except where noted)	For the Years Ended February,							
	2014A	2015A	2016A	2017P	2018P	2019P	2020P	2021P
Retained Earnings								
Beginning Balance	169,039	99,877	177,817	194,497	111,825	28,660	(9,860)	(4,655)
Net Income (Loss) from annual operations	(69,163)	2,440	(56,050)	(13,394)	(90,666)	(28,770)	11,205	1,216
Premium Rebate	-	-	-	-	-	-	-	-
Transfer (to) / from Non-Basic Retained Earnings	-	75,500	72,730	(69,277)	7,500	(9,750)	(6,000)	(26,000)
Total Retained Earnings	**$ 99,876**	**$ 177,817**	**$ 194,497**	**$ 111,825**	**$ 28,660**	**$ (9,860)**	**$ (4,655)**	**$ (29,438)**
Retained Earnings								
DCAT Equity Reserve	99,877	177,817	194,496	111,825	28,660	(9,860)	(4,655)	(29,438)
Excess Retained Earnings	-	(0)	0	-	-	-	-	-
Total Retained Earnings	**$ 99,877**	**$ 177,817**	**$ 194,497**	**$ 111,825**	**$ 28,660**	**$ (9,860)**	**$ (4,655)**	**$ (29,438)**
Total Accumulated Other Comprehensive Income								
Beginning Balance	56,800	70,284	35,262	36,504	36,025	25,993	9,869	13,454
Other Comprehensive Income for the Year	13,484	(35,022)	1,242	(479)	(10,031)	(16,125)	3,586	33,875
Total Accumulated Other Comprehensive Income	**$ 70,284**	**$ 35,262**	**$ 36,504**	**$ 36,025**	**$ 25,993**	**$ 9,869**	**$ 13,454**	**$ 47,329**
Total Equity Balance	**$ 170,160**	**$ 213,079**	**$ 231,000**	**$ 147,850**	**$ 54,653**	**$ 9**	**$ 8,800**	**$ 17,891**

RESERVE TARGETS

PUB RSR Target	172,000	172,000	194,000	194,000	194,000	194,000	194,000	194,000
DCAT Total Equity Target	0	213,000	231,000	231,000	231,000	231,000	231,000	231,000
MCT Total Equity Target	0	0	325,000	365,000	365,000	365,000	365,000	365,000

Exhibit 1c
2-Year 1-in-20 Combined Modified Scenario
Balance Sheet

(C$ 000s, except where noted)	*For the Years Ended February,*							
	2014A	2015A	2016A	2017P	2018P	2019P	2020P	2021P
BASIC								
Assets								
Cash and investments	76,166	55,508	29,114	10,731	9,526	9,783	9,735	9,317
Equity investments	1,948,658	2,061,262	2,083,349	2,073,899	2,140,280	2,215,311	2,293,854	2,410,590
Investment property	32,226	35,087	35,789	39,147	39,739	39,880	40,367	41,148
Due from other insurance companies	1,755	108	25	-	-	-	-	-
Accounts receivable	236,347	348,697	375,262	302,393	320,560	344,443	358,968	374,137
Prepaid expenses	-	-	-	-	-	-	-	-
Deferred policy acquisition costs	-	-	4,782	6,933	4,278	14,716	16,761	18,809
Reinsurers' share of unearned premiums	-	-	-	-	-	-	-	-
Reinsurers' share of unearned claims	17,625	2,565	998	-	-	-	-	-
Property and equipment	80,108	90,474	88,740	86,248	88,863	90,183	90,345	91,720
Deferred development costs	54,685	56,992	65,414	70,462	77,341	79,991	81,701	64,385
	2,447,570	**2,650,693**	**2,683,473**	**2,589,814**	**2,680,589**	**2,794,306**	**2,891,731**	**3,010,106**
Liabilities								
Due to other insurance companies	1,213	-	152	113	113	113	113	113
Accounts payable and accrued liabilities	35,769	34,157	38,860	29,447	30,993	31,499	32,418	33,959
Financing lease obligation	2,841	3,224	3,278	2,968	2,899	2,825	2,752	2,678
Unearned premiums and fees	402,982	426,137	453,389	475,671	508,213	551,845	578,853	607,238
Provision for employee current benefits	15,389	16,240	16,871	16,527	16,880	17,244	17,616	17,999
Provision for employee future benefits	235,172	286,581	281,209	286,836	302,414	319,313	336,739	354,910
Provision for unpaid claims	1,584,042	1,671,275	1,658,713	1,630,402	1,764,423	1,871,458	1,914,441	1,975,319
	2,277,408	**2,437,614**	**2,452,472**	**2,441,964**	**2,625,936**	**2,794,297**	**2,882,932**	**2,992,215**
Equity								
Retained earnings								
Basic Insurance Retained Earnings								
Rate Stabilization Reserve	99,878	177,817	194,496	111,825	28,660	(9,860)	(4,655)	(29,438)
Retained Earnings	-	(0)	0	-	-	-	-	-
	99,878	177,817	194,497	111,825	28,660	(9,860)	(4,655)	(29,438)
Accumulated Other Comprehensive Income	70,284	35,262	36,504	36,025	25,993	9,869	13,454	47,329
Total Equity	**170,162**	**213,079**	**231,000**	**147,850**	**54,653**	**9**	**8,800**	**17,891**
	-	-	-	-	-	-	-	-
	2,447,570	**2,650,693**	**2,683,473**	**2,589,814**	**2,680,589**	**2,794,306**	**2,891,731**	**3,010,106**

Exhibit 1d
2-Year 1-in-20 Combined Modified Scenario
Minimum Capital Test

(All figures in $000s)		2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021
		Current Year (01)	Forecast Year (02)	Forecast Year (03)	Forecast Year (04)	Forecast Year (05)
Capital Available:						
Capital available (from page 30.62 - capital available)	01	77,388	(22,688)	(79,982)	(72,901)	(46,494)
Phase-in of capital available	03	0	0	0	0	0
Total Capital Available	**09**	77,388	(22,688)	(79,982)	(72,901)	(46,494)
Assets Available:						
Net Assets Available (from page 30.92 - net assets available)	11	0	0	0	0	0
Phase-in of net assets available	13	0	0	0	0	0
Total Net Assets Available	**19**	0	0	0	0	0
Capital (Margin) Required at Target:						
Insurance Risk:						
Premium liabilities	20	81,838	87,331	94,850	99,204	103,758
Unpaid claims	22	171,660	185,868	196,948	201,601	208,265
Catastrophes	24	0	0	0	0	0
Margin required for reinsurance ceded to unregistered insurers	26	0	0	0	0	0
Subtotal: Insurance risk margin	29	253,498	273,199	291,798	300,805	312,023
Market Risk:						
Interest rate risk	30	19,527	37,061	35,982	29,698	35,314
Foreign exchange risk	32	17,884	19,415	16,561	16,114	13,269
Equity risk	34	134,005	147,983	133,309	128,448	156,665
Real estate risk	36	54,561	57,105	59,149	61,268	63,333
Other market risk exposures	38	0	0	0	0	0
Subtotal: Market risk margin	39	225,977	261,564	245,001	235,528	268,581
Credit Risk:						
Counterparty default risk for balance sheet assets	40	16,081	16,694	18,939	19,869	20,821
Counterparty default risk for off-balance sheet exposures	42	0	0	0	0	0
Counterparty default risk for unregistered reinsurance collateral and SIRs	44	0	0	0	0	0
Subtotal: Credit risk margin	49	16,081	16,694	18,939	19,869	20,821
Operational risk margin	50	65,426	71,758	74,289	75,578	80,730
Less: Diversification credit	52	66,354	73,875	74,253	73,982	80,453
Total Capital (Margin) Required at Target	59	494,628	549,340	555,774	557,798	601,702
Minimum Capital (Margin) Required (line 59 / 1.5)	60	329,752	366,227	370,516	371,865	401,135
Phase-in of Capital (Margin) Required	62	0	0	0	0	0
Total Minimum Capital (Margin) Required	69	329,752	366,227	370,516	371,865	401,135
Excess Capital (Net Assets Available) over Minimum Capital (Margin) Required	79	(252,364)	(388,915)	(450,498)	(444,766)	(447,629)
MCT (BAAT) Ratio (Line 09 or line 19 as a % of line 69)	90	23.47%	-6.20%	-21.59%	-19.60%	-11.59%

Exhibit 1e
2-Year 1-in-20 Combined Modified Scenario
Net Claims Incurred Summary

(C$ 000s, except where noted)

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Claims Incurred before Financial Provisions						
Collision	353,144	392,835	441,049	457,052	476,127	508,217
Comprehensive	126,346	84,789	84,766	95,185	97,468	101,940
Property Damage	42,456	43,241	48,943	46,398	47,348	48,831
Public Liability - BI	5,744	4,232	4,577	5,363	4,555	4,612
PIPP	115,221	127,255	252,083	242,757	193,653	209,436
Total	**642,912**	**652,351**	**831,418**	**846,755**	**819,150**	**873,037**
Unallocated Loss Adjustment Expenses	40,148	39,919	41,338	42,939	44,916	46,857
Change in Internal Loss Adjustment Expense Provision	503	(5,709)	15,114	11,694	2,502	5,318
Change in Reinsurance Ceded Provision	(1,076)	0	0	0	0	0
Other Financial Adjustments	(1,124)	0	0	0	0	0
Change in DPAC / Premium Deficiency Provision	(14,959)	(4,792)	4,408	(8,003)	(664)	(598)
Total Net Claims Incurred	**666,404**	**681,770**	**892,278**	**893,385**	**865,903**	**924,613**

Exhibit 1f
2-Year 1-in-20 Combined Modified Scenario
Deferred Policy Acquisition Expenses and Premium Deficiency

A. Claims (Including External Adjustment Expense) Data

		Accident Year										Selected	Selected
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Undisc	Disc
1.	Ultimate Loss Ratio - Total All Coverage	70.49%	77.72%	83.83%	73.78%	78.00%	76.26%	78.98%	75.26%	72.18%	72.35%		
2.	Trend/Rate Adjustment for Fiscal Year												
	2015	0.9933	0.9552	0.9341	0.9491	0.9854							
	2016		0.9408	0.9212	0.9371	0.9740	0.9998						
	2017			0.9175	0.9274	0.9578	0.9770	0.9962					
	2018				0.9187	0.9415	0.9529	0.9641	0.9934				
	2019					0.9386	0.9510	0.9631	0.9935	1.0112			
	2020						0.9478	0.9605	0.9913	1.0096	1.0107		
3.	Adjusted Loss Ratio for Fiscal Year [(1) x (2)]												
	2015	70.02%	74.24%	78.31%	70.02%	76.86%						73.71%	78.15%
	2016		73.12%	77.23%	69.13%	75.97%	76.24%					75.11%	78.85%
	2017			76.92%	68.42%	74.71%	74.50%	78.68%				75.37%	79.59%
	2018				67.78%	73.43%	72.66%	76.14%	74.76%			73.62%	78.08%
	2019					73.21%	72.52%	76.07%	74.77%	72.99%		73.66%	77.99%
	2020						72.28%	75.86%	74.61%	72.87%	73.13%	73.54%	77.88%

B. Actual Data Other Than Losses

		Fiscal Year									
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
4.	Net Earned Premium	761,677	756,751	764,671	802,743	861,065	912,195	965,997	1,041,843	1,108,765	1,160,017
5.	Operating Expenses as % of Earned Premium	9.70%	10.82%	11.1%	11.1%	10.8%	10.3%	9.8%	9.6%	9.2%	9.2%
6.	Maintenance Expense Rate [(5) x 1/3]	3.23%	3.61%	3.69%	3.69%	3.61%	3.42%	3.27%	3.21%	3.06%	3.07%
	Selected					3.66%	3.57%	3.43%	3.30%	3.18%	3.12%
7.	ILAE Ratio to Losses - Selected					19.00%	19.00%	19.00%	19.00%	19.00%	19.00%

C. Equity in Unearned Premium

		2015	2016	2017	2018	2019	2020
8.	Net Unearned Premium	417,518	437,504	466,869	507,059	530,335	554,677
9.	Additional Expected Cost of Non-Proportional Reinsurance	5,816	5,938	6,057	6,178	6,302	6,428
10.	Expected Claims (Including Ext Adj Expenses) [((8) - (9)) x (3)]	325,991	340,301	366,771	391,064	408,685	426,970
11.	Reinsurance PFAD	-	-	-	-	-	-
12.	Maintenance Expense [a]	14,727	15,410	15,813	16,535	16,674	17,083
13.	Internal Loss Adjustment Expense [Sheet 1, Row 11]	61,938	64,657	69,686	74,302	77,650	81,124
14.	Expected Claims (Including Ext Adj Expenses) - PIPP Enhancement	4,264	4,264	4,264	4,264	4,264	4,264
15.	Equity in Unearned Premium [(8) - Sum((9) to (14))]	4,782	6,933	4,278	14,716	16,761	18,809
16.	Carried Deferred Policy Acquisition Expenses	28,347	25,706	27,459	29,894	31,275	32,724
17.	Write Down Deferred Policy Acquisition Expenses [b]	23,565	18,773	23,181	15,178	14,514	13,916
	Change	(3,009)	(4,792)	4,408	(8,003)	(664)	(598)
18.	Premium Deficiency [c]	-	-	-	-	-	-
	Change	(11,950)	-	-	-	-	-

Notes:

[a] ((8) - (9)) x (6) x Discount to Valuation Date Without Margin

[b] Min((16) - (15), (16)) if greater than 0, otherwise 0

[c] Negative of (15) if greater than 0, otherwise 0

Exhibit 1g
2-Year 1-in-20 Combined Modified Scenario
Summary of Corporate Investment Income

	2016/17	2017/18	2018/19 Forecasted	2019/20	2020/21
Interest Income During Period					
Cash/Short Term Investments	42	(2)	(0)	0	0
Marketable Bonds	37,772	34,586	33,776	34,997	35,830
MUSH	28,949	28,765	28,301	27,635	26,960
Total	**66,763**	**63,349**	**62,077**	**62,632**	**62,791**
Dividend and other Income					
Canadian Equities	9,121	9,987	9,614	8,662	10,917
US Equities	4,386	5,297	5,038	4,623	5,258
Investment Properties (Cityplace)	3,431	2,149	4,952	4,873	4,771
Infrastructure	1,268	1,721	1,828	1,931	2,039
Total	**18,206**	**19,154**	**21,432**	**20,089**	**22,985**
Gains During Period - Profit & Loss					
Marketable Bonds Unrealized Gains/(Loss)	(66,955)	31,163	31,953	(6,878)	1,460
Marketable Bonds Realized Gains/(Loss)	(8,785)	7,528	4,743	(3,288)	(1,460)
Amortization on Marketable Bonds (Prem) / Discount	(6,460)	(5,760)	(8,381)	(9,463)	(9,569)
MUSH	-	-	-	-	-
Canadian Equities Realized Gains	11,065	4,337	4,421	4,220	10,152
US Equities Realized Gains	7,075	-	6,142	5,033	-
Real Estate (Pooled Fund)	12,618	14,271	14,667	15,547	16,480
Infrastructure	4,971	6,740	7,164	7,566	7,989
Total	**(46,470)**	**58,278**	**60,709**	**12,737**	**25,052**
Other					
Investment Fees Paid	(4,449)	(4,620)	(4,733)	(4,971)	(5,256)
Pension Expense	(14,401)	(15,071)	(15,763)	(16,483)	(17,235)
Investment Write-Down	-	-	-	-	-
Total	**(18,850)**	**(19,691)**	**(20,496)**	**(21,454)**	**(22,491)**
Total Corporate Investment Income	**19,649**	**121,091**	**123,722**	**74,003**	**88,336**
Total Basic Investment Income	16,794	102,142	103,415	61,165	72,247
% - Basic to Total Investment Income	85%	84%	84%	83%	82%
Equity Unrealized Gains/(Losses)					
Canadian Equities Unrealized Gains	10,443	(4,666)	(5,736)	8,431	45,722
US Equities Unrealized Gains	6,619	(2,329)	(2,709)	5,294	6,020
Total Corporate Unrealized Gains/(Losses)	**17,062**	**(6,996)**	**(8,446)**	**13,725**	**51,743**

Ending Values and Allocations

	2016/17	2017/18	2018/19 Forecasted	2019/20	2020/21
Ending Asset Values for Corporate ($Millions)					
Cash/Short Term Investments	-	-	-	-	-
Canadian Fixed Income	1,091.8	1,096.2	1,248.1	1,368.2	1,419.0
MUSH	643.8	658.8	669.9	678.0	683.8
Canadian Equities	273.0	300.4	260.4	245.3	337.6
US Equities	154.3	168.4	148.7	142.5	171.7
Real Estate	277.5	292.7	308.1	324.9	343.3
Infrastructure & Venture Capital	112.3	130.1	137.2	144.8	152.8
Total Corporate Assets	**2,552.7**	**2,646.6**	**2,772.4**	**2,903.7**	**3,108.2**
Total Basic Assets	**2,123.8**	**2,189.5**	**2,265.0**	**2,344.0**	**2,461.1**
Ending Rebalanced Allocations (%)					
Cash/Short Term Investments	0.0%	0.0%	0.0%	0.0%	0.0%
Canadian Fixed Income	42.8%	41.4%	45.0%	47.1%	45.7%
MUSH	25.2%	24.9%	24.2%	23.3%	22.0%
Canadian Equities	10.7%	11.4%	9.4%	8.4%	10.9%
US Equities	6.0%	6.4%	5.4%	4.9%	5.5%
Real Estate	10.9%	11.1%	11.1%	11.2%	11.0%
Infrastructure & Venture Capital	4.4%	4.9%	4.9%	5.0%	4.9%
Total Corporate	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Exhibit 2a
2-Year 1-in-40 Combined Modified Scenario
Statement of Operations

(C$ 000s, except where noted)	*For the Years Ended February,*							
	2014A	**2015A**	**2016A**	**2017P**	**2018P**	**2019P**	**2020P**	**2021P**
BASIC								
Motor Vehicles	756,642	794,052	854,170	893,420	954,331	1,038,966	1,086,974	1,137,336
Drivers	41,520	44,642	46,619	50,393	52,908	55,180	57,424	59,626
Reinsurance Ceded	(13,422)	(13,829)	(12,423)	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Written	**784,741**	**824,865**	**888,365**	**932,181**	**995,362**	**1,082,032**	**1,132,042**	**1,184,358**
Net Premiums Earned								
Motor Vehicles	741,077	774,784	827,701	875,348	926,228	999,917	1,064,824	1,114,100
Drivers	37,015	42,926	45,787	48,478	51,645	54,039	56,298	58,521
Reinsurance Ceded	(13,422)	(13,829)	(12,423)	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Earned	**764,671**	**803,880**	**861,065**	**912,195**	**965,997**	**1,041,843**	**1,108,765**	**1,160,017**
Service Fees & Other Revenues	20,383	19,475	20,351	21,557	23,227	24,999	27,199	29,130
Total Earned Revenues	**785,053**	**823,356**	**881,416**	**933,752**	**989,224**	**1,066,842**	**1,135,964**	**1,189,147**
Net Claims Incurred	747,435	745,837	666,404	681,770	935,175	841,658	883,286	922,764
Claims Expense	114,552	116,578	118,614	125,191	128,312	133,827	141,956	149,230
Road Safety/Loss Prevention	12,816	11,359	13,027	13,318	13,210	14,188	14,221	14,364
Total Claims Costs	**874,803**	**873,773**	**798,045**	**820,279**	**1,076,697**	**989,672**	**1,039,463**	**1,086,357**
Expenses								
Operating	67,982	74,283	71,641	76,908	78,026	82,909	84,055	88,883
Commissions	32,058	32,845	33,862	35,616	37,376	39,975	42,507	44,405
Premium Taxes	23,343	24,531	26,205	27,715	29,336	31,619	33,634	35,179
Regulatory/Appeal	3,766	3,935	3,675	3,421	3,494	3,567	3,643	3,720
Total Expenses	**127,148**	**135,594**	**135,383**	**143,661**	**148,232**	**158,070**	**163,838**	**172,186**
Underwriting Income (Loss)	**(216,898)**	**(186,011)**	**(52,012)**	**(30,188)**	**(235,705)**	**(80,900)**	**(67,337)**	**(69,397)**
Investment Income	147,735	188,451	(4,038)	16,794	130,421	61,121	58,928	66,945
Net Income (Loss) from Operations	**(69,163)**	**2,440**	**(56,050)**	**(18,186)**	**(98,827)**	**(30,713)**	**(8,322)**	**(3,103)**
DPAC / Premium Deficiency writedown Adj.	-	-	-	(4,792)	6,457	(10,933)	87	(651)
Net Income (Loss)	**(69,163)**	**2,440**	**(56,050)**	**(13,394)**	**(105,283)**	**(19,780)**	**(8,409)**	**(2,452)**

Manitoba Public Insurance

Exhibit 2b
2-Year 1-in-40 Combined Modified Scenario
Statement of Changes in Equity

(C$ 000s, except where noted)

	For the Years Ended February,							
	2014A	2015A	2016A	2017P	2018P	2019P	2020P	2021P
Retained Earnings								
Beginning Balance	169,039	99,877	177,817	194,497	146,597	48,814	19,284	4,875
Net Income (Loss) from annual operations	(69,163)	2,440	(56,050)	(13,394)	(105,283)	(19,780)	(8,409)	(2,452)
Premium Rebate	-	-	-	-	-	-	-	-
Transfer (to) / from Non-Basic Retained Earnings	-	75,500	72,730	(34,506)	7,500	(9,750)	(6,000)	(26,000)
Total Retained Earnings	**$ 99,876**	**$ 177,817**	**$ 194,497**	**$ 146,597**	**$ 48,814**	**$ 19,284**	**$ 4,875**	**$ (23,577)**
Retained Earnings								
DCAT Equity Reserve	99,877	177,817	194,496	146,597	48,814	19,284	4,875	(23,577)
Excess Retained Earnings	-	(0)	0	-	-	-	-	-
Total Retained Earnings	**$ 99,877**	**$ 177,817**	**$ 194,497**	**$ 146,597**	**$ 48,814**	**$ 19,284**	**$ 4,875**	**$ (23,577)**
Total Accumulated Other Comprehensive Income								
Beginning Balance	56,800	70,284	35,262	36,504	36,025	9,406	(19,259)	(8,595)
Other Comprehensive Income for the Year	13,484	(35,022)	1,242	(479)	(26,619)	(28,665)	10,664	32,948
Total Accumulated Other Comprehensive Income	**$ 70,284**	**$ 35,262**	**$ 36,504**	**$ 36,025**	**$ 9,406**	**$ (19,259)**	**$ (8,595)**	**$ 24,353**
Total Equity Balance	**$ 170,160**	**$ 213,079**	**$ 231,000**	**$ 182,622**	**$ 58,220**	**$ 25**	**$ (3,720)**	**$ 776**

RESERVE TARGETS

PUB RSR Target	172,000	172,000	194,000	194,000	194,000	194,000	194,000	194,000
DCAT Total Equity Target	0	213,000	231,000	231,000	231,000	231,000	231,000	231,000
MCT Total Equity Target	0	0	325,000	365,000	365,000	365,000	365,000	365,000

Exhibit 2c
2-Year 1-in-40 Combined Modified Scenario
Balance Sheet

(C$ 000s, except where noted)	*For the Years Ended February,*							
	2014A	**2015A**	**2016A**	**2017P**	**2018P**	**2019P**	**2020P**	**2021P**
BASIC								
Assets								
Cash and investments	76,166	55,508	29,114	10,907	9,201	9,934	9,499	9,204
Equity investments	1,948,658	2,061,262	2,083,349	2,107,854	2,181,212	2,196,822	2,281,476	2,393,021
Investment property	32,226	35,087	35,789	39,788	40,362	40,458	40,933	41,689
Due from other insurance companies	1,755	108	25	-	-	-	-	-
Accounts receivable	236,347	348,697	375,262	302,393	320,560	344,443	358,968	374,137
Prepaid expenses	-	-	-	-	-	-	-	-
Deferred policy acquisition costs	-	-	4,782	6,933	2,230	15,598	16,892	18,993
Reinsurers' share of unearned premiums	-	-	-	-	-	-	-	-
Reinsurers' share of unearned claims	17,625	2,565	998	-	-	-	-	-
Property and equipment	80,108	90,474	88,740	86,248	88,863	90,183	90,345	91,720
Deferred development costs	54,685	56,992	65,414	70,462	77,341	79,991	81,701	64,385
	2,447,570	**2,650,693**	**2,683,473**	**2,624,585**	**2,719,769**	**2,777,429**	**2,879,815**	**2,993,149**
Liabilities								
Due to other insurance companies	1,213	-	152	113	113	113	113	113
Accounts payable and accrued liabilities	35,769	34,157	38,860	29,447	30,993	31,499	32,418	33,959
Financing lease obligation	2,841	3,224	3,278	2,968	2,899	2,825	2,752	2,678
Unearned premiums and fees	402,982	426,137	453,389	475,671	508,213	551,845	578,853	607,238
Provision for employee current benefits	15,389	16,240	16,871	16,527	16,880	17,244	17,616	17,999
Provision for employee future benefits	235,172	286,581	281,209	286,836	302,414	319,313	336,739	354,910
Provision for unpaid claims	1,584,042	1,671,275	1,658,713	1,630,402	1,800,037	1,854,564	1,915,044	1,975,476
	2,277,408	**2,437,614**	**2,452,472**	**2,441,964**	**2,661,549**	**2,777,404**	**2,883,535**	**2,992,372**
Equity								
Retained earnings								
Basic Insurance Retained Earnings								
Rate Stabilization Reserve	99,878	177,817	194,496	146,597	48,814	19,284	4,875	(23,577)
Retained Earnings	-	(0)	0	-	-	-	-	-
	99,878	177,817	194,497	146,597	48,814	19,284	4,875	(23,577)
Accumulated Other Comprehensive Income	70,284	35,262	36,504	36,025	9,406	(19,259)	(8,595)	24,353
Total Equity	170,162	213,079	231,000	182,622	58,220	25	(3,720)	776
	-	-	-	-	-	-	-	-
	2,447,570	**2,650,693**	**2,683,473**	**2,624,585**	**2,719,769**	**2,777,429**	**2,879,815**	**2,993,149**

Exhibit 2d
2-Year 1-in-40 Combined Modified Scenario
Minimum Capital Test

(All figures in $000s)		2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021
		Current Year (01)	Forecast Year (02)	Forecast Year (03)	Forecast Year (04)	Forecast Year (05)
Capital Available:						
Capital available (from page 30.62 - capital available)	01	112,160	(19,121)	(79,966)	(85,421)	(63,609)
Phase-in of capital available	03	0	0	0	0	0
Total Capital Available	**09**	112,160	(19,121)	(79,966)	(85,421)	(63,609)
Assets Available:						
Net Assets Available (from page 30.92 - net assets available)	11	0	0	0	0	0
Phase-in of net assets available	13	0	0	0	0	0
Total Net Assets Available	**19**	0	0	0	0	0
Capital (Margin) Required at Target:						
Insurance Risk:						
Premium liabilities	20	81,838	87,331	94,850	99,204	103,758
Unpaid claims	22	171,660	189,552	195,357	201,665	208,284
Catastrophes	24	0	0	0	0	0
Margin required for reinsurance ceded to unregistered insurers	26	0	0	0	0	0
Subtotal: Insurance risk margin	29	253,498	276,883	290,207	300,869	312,042
Market Risk:						
Interest rate risk	30	16,615	40,064	26,601	30,445	32,430
Foreign exchange risk	32	18,177	20,182	14,096	15,459	11,468
Equity risk	34	136,199	153,760	111,802	123,278	143,846
Real estate risk	36	55,313	57,861	59,876	62,001	64,044
Other market risk exposures	38	0	0	0	0	0
Subtotal: Market risk margin	39	226,304	271,867	212,375	231,183	251,788
Credit Risk:						
Counterparty default risk for balance sheet assets	40	16,086	16,481	19,031	19,876	20,837
Counterparty default risk for off-balance sheet exposures	42	0	0	0	0	0
Counterparty default risk for unregistered reinsurance collateral and SIRs	44	0	0	0	0	0
Subtotal: Credit risk margin	49	16,086	16,481	19,031	19,876	20,837
Operational risk margin	50	65,454	72,929	71,388	75,215	79,306
Less: Diversification credit	52	66,400	75,693	68,927	73,296	77,947
Total Capital (Margin) Required at Target	59	494,942	562,467	524,074	553,847	586,026
Minimum Capital (Margin) Required (line 59 / 1.5)	60	329,961	374,978	349,382	369,231	390,684
Phase-in of Capital (Margin) Required	62	0	0	0	0	0
Total Minimum Capital (Margin) Required	69	329,961	374,978	349,382	369,231	390,684
Excess Capital (Net Assets Available) over Minimum Capital (Margin) Required	79	(217,801)	(394,099)	(429,348)	(454,652)	(454,293)
MCT (BAAT) Ratio (Line 09 or line 19 as a % of line 69)	90	33.99%	-5.10%	-22.89%	-23.13%	-16.28%

Exhibit 2e
2-Year 1-in-40 Combined Modified Scenario
Net Claims Incurred Summary

(C$ 000s, except where noted)

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Claims Incurred before Financial Provisions						
Collision	353,144	392,835	448,321	466,369	476,045	508,207
Comprehensive	126,346	84,789	86,760	91,431	97,525	101,945
Property Damage	42,456	43,241	48,176	47,064	47,354	48,829
Public Liability - BI	5,744	4,232	3,747	5,229	4,592	4,616
PIPP	115,221	127,255	280,262	195,220	207,444	207,603
Total	**642,912**	**652,351**	**867,267**	**805,313**	**832,960**	**871,200**
Unallocated Loss Adjustment Expenses	40,148	39,919	41,338	42,939	44,916	46,857
Change in Internal Loss Adjustment Expense Provision	503	(5,709)	20,114	4,339	5,324	5,358
Change in Reinsurance Ceded Provision	(1,076)	0	0	0	0	0
Other Financial Adjustments	(1,124)	0	0	0	0	0
Change in DPAC / Premium Deficiency Provision	(14,959)	(4,792)	6,457	(10,933)	87	(651)
Total Net Claims Incurred	**666,404**	**681,770**	**935,175**	**841,658**	**883,286**	**922,764**

Exhibit 2f
2-Year 1-in-40 Combined Modified Scenario
Deferred Policy Acquisition Expenses and Premium Deficiency

A. Claims (Including External Adjustment Expense) Data

		Accident Year										Selected	Selected
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Undisc	Disc
1.	Ultimate Loss Ratio - Total All Coverage	70.49%	77.72%	83.83%	73.78%	78.00%	76.26%	78.91%	74.94%	72.18%	72.35%		
2.	Trend/Rate Adjustment for Fiscal Year												
	2015	0.9933	0.9552	0.9341	0.9491	0.9854							
	2016		0.9408	0.9212	0.9371	0.9740	0.9998						
	2017			0.9171	0.9271	0.9576	0.9768	0.9961					
	2018				0.9179	0.9408	0.9524	0.9638	0.9932				
	2019					0.9378	0.9503	0.9626	0.9931	1.0110			
	2020						0.9470	0.9598	0.9908	1.0092	1.0106		
3.	Adjusted Loss Ratio for Fiscal Year [(1) x (2)]												
	2015	70.02%	74.24%	78.31%	70.02%	76.86%						73.71%	78.15%
	2016		73.12%	77.23%	69.13%	75.97%	76.24%					75.11%	78.85%
	2017			76.88%	68.40%	74.69%	74.49%	78.60%				75.35%	79.97%
	2018				67.72%	73.38%	72.63%	76.05%	74.44%			73.48%	77.93%
	2019					73.14%	72.47%	75.96%	74.43%	72.98%		73.52%	77.97%
	2020						72.21%	75.74%	74.25%	72.85%	73.12%	73.41%	77.85%

B. Actual Data Other Than Losses

		Fiscal Year									
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
4.	Net Earned Premium	761,677	756,751	764,671	802,743	861,065	912,195	965,997	1,041,843	1,108,765	1,160,017
5.	Operating Expenses as % of Earned Premium	9.70%	10.82%	11.1%	11.1%	10.8%	10.3%	9.8%	9.7%	9.2%	9.2%
6.	Maintenance Expense Rate [(5) x 1/3]	3.23%	3.61%	3.69%	3.69%	3.61%	3.42%	3.27%	3.22%	3.06%	3.07%
	Selected					3.66%	3.57%	3.43%	3.30%	3.18%	3.12%
7.	ILAE Ratio to Losses - Selected					19.00%	19.00%	19.00%	19.00%	19.00%	19.00%

C. Equity in Unearned Premium

		2015	2016	2017	2018	2019	2020
8.	Net Unearned Premium	417,518	437,504	466,869	507,059	530,335	554,677
9.	Additional Expected Cost of Non-Proportional Reinsurance	5,816	5,938	6,057	6,178	6,302	6,428
10.	Expected Claims (Including Ext Adj Expenses) [((8) - (9)) x (3)]	325,991	340,301	368,492	390,315	408,566	426,802
11.	Reinsurance PFAD	-	-	-	-	-	-
12.	Maintenance Expense [a]	14,727	15,410	15,814	16,544	16,684	17,098
13.	Internal Loss Adjustment Expense [Sheet 1, Row 11]	61,938	64,657	70,014	74,160	77,628	81,092
14.	Expected Claims (Including Ext Adj Expenses) - PIPP Enhancement	4,264	4,264	4,264	4,264	4,264	4,264
15.	Equity in Unearned Premium [(8) - Sum((9) to (14))]	4,782	6,933	2,230	15,598	16,892	18,993
16.	Carried Deferred Policy Acquisition Expenses	28,347	25,706	27,459	29,894	31,275	32,724
17.	Write Down Deferred Policy Acquisition Expenses [b]	23,565	18,773	25,229	14,296	14,383	13,731
	Change	(3,009)	(4,792)	6,457	(10,933)	87	(651)
18.	Premium Deficiency [c]	-	-	-	-	-	-
	Change	(11,950)	-	-	-	-	-

Notes:

[a] ((8) - (9)) x (6) x Discount to Valuation Date Without Margin

[b] Min((16) - (15), (16)) if greater than 0, otherwise 0

[c] Negative of (15) if greater than 0, otherwise 0

Manitoba Public Insurance

Exhibit 2g
2-Year 1-in-40 Combined Modified Scenario
Summary of Corporate Investment Income

	2016/17	2017/18	2018/19	2019/20	2020/21
			Forecasted		
Interest Income During Period					
Cash/Short Term Investments	42	(5)	0	(0)	(0)
Marketable Bonds	37,772	33,198	33,244	33,836	34,692
MUSH	28,949	28,707	28,147	27,474	26,768
Total	**66,763**	**61,900**	**61,391**	**61,310**	**61,460**
Dividend and other Income					
Canadian Equities	9,121	10,253	8,049	7,631	9,676
US Equities	4,386	5,399	4,264	4,086	4,652
Investment Properties (Cityplace)	3,431	2,149	4,952	4,873	4,771
Infrastructure	1,268	1,721	1,828	1,931	2,039
Total	**18,206**	**19,522**	**19,092**	**18,521**	**21,138**
Gains During Period - Profit & Loss					
Marketable Bonds Unrealized Gains/(Loss)	(66,955)	58,659	1,512	1,643	1,690
Marketable Bonds Realized Gains/(Loss)	(8,785)	18,198	(1,512)	(1,643)	(1,690)
Amortization on Marketable Bonds (Prem) / Discount	(6,460)	(7,004)	(9,028)	(9,810)	(10,090)
MUSH	-	-	-	-	-
Canadian Equities Realized Gains	11,065	1,690	(7,248)	(517)	7,211
US Equities Realized Gains	7,075	-	7,458	-	-
Real Estate (Pooled Fund)	12,618	14,271	14,667	15,547	16,480
Infrastructure	4,971	6,740	7,164	7,566	7,989
Total	**(46,470)**	**92,554**	**13,013**	**12,785**	**21,589**
Other					
Investment Fees Paid	(4,449)	(4,620)	(4,733)	(4,971)	(5,256)
Pension Expense	(14,401)	(15,071)	(15,763)	(16,483)	(17,235)
Investment Write-Down	-	-	-	-	-
Total	**(18,850)**	**(19,691)**	**(20,496)**	**(21,454)**	**(22,491)**
Total Corporate Investment Income	**19,649**	**154,285**	**73,000**	**71,161**	**81,696**
Total Basic Investment Income	16,794	130,421	61,121	58,928	66,945
% - Basic to Total Investment Income	85%	85%	84%	83%	82%
Equity Unrealized Gains/(Losses)					
Canadian Equities Unrealized Gains	10,443	(18,935)	(22,141)	7,428	41,982
US Equities Unrealized Gains	6,619	(10,396)	(11,779)	4,679	5,326
Total Corporate Unrealized Gains/(Losses)	**17,062**	**(29,331)**	**(33,921)**	**12,106**	**47,309**

Ending Values and Allocations

	2016/17	2017/18	2018/19	2019/20	2020/21
			Forecasted		
Ending Asset Values for Corporate ($Millions)					
Cash/Short Term Investments	-	-	-	-	-
Canadian Fixed Income	1,091.8	1,091.3	1,281.4	1,342.0	1,419.5
MUSH	643.8	658.8	669.9	678.0	683.8
Canadian Equities	273.0	310.3	198.5	227.6	296.7
US Equities	154.3	172.3	115.9	131.7	150.5
Real Estate	277.5	292.7	308.1	324.9	343.3
Infrastructure & Venture Capital	112.3	130.1	137.2	144.8	152.8
Total Corporate Assets	**2,552.7**	**2,655.4**	**2,711.1**	**2,849.0**	**3,046.6**
Total Basic Assets	2,158.5	2,230.8	2,247.2	2,331.9	2,443.9
Ending Rebalanced Allocations (%)					
Cash/Short Term Investments	0.0%	0.0%	0.0%	0.0%	0.0%
Canadian Fixed Income	42.8%	41.1%	47.3%	47.1%	46.6%
MUSH	25.2%	24.8%	24.7%	23.8%	22.4%
Canadian Equities	10.7%	11.7%	7.3%	8.0%	9.7%
US Equities	6.0%	6.5%	4.3%	4.6%	4.9%
Real Estate	10.9%	11.0%	11.4%	11.4%	11.3%
Infrastructure & Venture Capital	4.4%	4.9%	5.1%	5.1%	5.0%
Total Corporate	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Exhibit 3a
4-Year 1-in-20 Combined Modified Scenario
Statement of Operations

(C$ 000s, except where noted)	*For the Years Ended February,*							
	2014A	**2015A**	**2016A**	**2017P**	**2018P**	**2019P**	**2020P**	**2021P**
BASIC								
Motor Vehicles	756,642	794,052	854,170	893,420	954,331	997,909	1,097,814	1,207,764
Drivers	41,520	44,642	46,619	50,393	52,908	55,180	57,424	59,626
Reinsurance Ceded	(13,422)	(13,829)	(12,423)	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Written	**784,741**	**824,865**	**888,365**	**932,181**	**995,362**	**1,040,976**	**1,142,881**	**1,254,786**
Net Premiums Earned								
Motor Vehicles	741,077	774,784	827,701	875,348	926,228	977,803	1,051,720	1,157,035
Drivers	37,015	42,926	45,787	48,478	51,645	54,039	56,298	58,521
Reinsurance Ceded	(13,422)	(13,829)	(12,423)	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Earned	**764,671**	**803,880**	**861,065**	**912,195**	**965,997**	**1,019,729**	**1,095,661**	**1,202,952**
Service Fees & Other Revenues	20,383	19,475	20,351	21,557	23,227	24,999	26,965	29,191
Total Earned Revenues	**785,053**	**823,356**	**881,416**	**933,752**	**989,224**	**1,044,728**	**1,122,626**	**1,232,143**
Net Claims Incurred	747,435	745,837	666,404	681,770	908,644	869,488	886,161	908,418
Claims Expense	114,552	116,578	118,614	125,191	128,312	133,692	141,956	149,232
Road Safety/Loss Prevention	12,816	11,359	13,027	13,318	13,210	14,174	14,221	14,364
Total Claims Costs	**874,803**	**873,773**	**798,045**	**820,279**	**1,050,166**	**1,017,353**	**1,042,339**	**1,072,014**
Expenses								
Operating	67,982	74,283	71,641	76,908	78,026	82,833	84,055	88,883
Commissions	32,058	32,845	33,862	35,616	37,376	39,402	41,903	45,588
Premium Taxes	23,343	24,531	26,205	27,715	29,336	30,955	33,241	36,467
Regulatory/Appeal	3,766	3,935	3,675	3,421	3,494	3,567	3,643	3,720
Total Expenses	**127,148**	**135,594**	**135,383**	**143,661**	**148,232**	**156,758**	**162,841**	**174,658**
Underwriting Income (Loss)	**(216,898)**	**(186,011)**	**(52,012)**	**(30,188)**	**(209,174)**	**(129,383)**	**(82,554)**	**(14,528)**
Investment Income	147,735	188,451	(4,038)	16,794	134,063	79,168	65,019	60,974
Net Income (Loss) from Operations	**(69,163)**	**2,440**	**(56,050)**	**(18,186)**	**(70,970)**	**(43,169)**	**(34,884)**	**33,835**
DPAC / Premium Deficiency writedown Adj.	-	-	-	(4,792)	4,141	7,045	(17,349)	(12,610)
Net Income (Loss)	**(69,163)**	**2,440**	**(56,050)**	**(13,394)**	**(75,111)**	**(50,215)**	**(17,535)**	**46,445**

Exhibit 3b
4-Year 1-in-20 Combined Modified Scenario
Statement of Changes in Equity

(C$ 000s, except where noted)	*For the Years Ended February,*							
	2014A	**2015A**	**2016A**	**2017P**	**2018P**	**2019P**	**2020P**	**2021P**
Retained Earnings								
Beginning Balance	169,039	99,877	177,817	194,497	147,431	79,821	19,856	(3,679)
Net Income (Loss) from annual operations	(69,163)	2,440	(56,050)	(13,394)	(75,111)	(50,215)	(17,535)	46,445
Premium Rebate	-	-	-	-	-	-	-	-
Transfer (to) / from Non-Basic Retained Earnings	-	75,500	72,730	(33,672)	7,500	(9,750)	(6,000)	(26,000)
Total Retained Earnings	**$ 99,876**	**$ 177,817**	**$ 194,497**	**$ 147,431**	**$ 79,821**	**$ 19,856**	**$ (3,679)**	**$ 16,766**
Retained Earnings								
DCAT Equity Reserve	99,877	177,817	194,496	147,431	79,821	19,856	(3,679)	16,766
Excess Retained Earnings	-	(0)	0	-	-	-	-	-
Total Retained Earnings	**$ 99,877**	**$ 177,817**	**$ 194,497**	**$ 147,431**	**$ 79,821**	**$ 19,856**	**$ (3,679)**	**$ 16,766**
Total Accumulated Other Comprehensive Income								
Beginning Balance	56,800	70,284	35,262	36,504	36,025	29,787	10,326	3,738
Other Comprehensive Income for the Year	13,484	(35,022)	1,242	(479)	(6,238)	(19,461)	(6,588)	(6,264)
Total Accumulated Other Comprehensive Income	**$ 70,284**	**$ 35,262**	**$ 36,504**	**$ 36,025**	**$ 29,787**	**$ 10,326**	**$ 3,738**	**$ (2,526)**
Total Equity Balance	**$ 170,160**	**$ 213,079**	**$ 231,000**	**$ 183,456**	**$ 109,607**	**$ 30,182**	**$ 59**	**$ 14,240**

RESERVE TARGETS

PUB RSR Target	172,000	172,000	194,000	194,000	194,000	194,000	194,000	194,000
DCAT Total Equity Target	0	213,000	231,000	231,000	231,000	231,000	231,000	231,000
MCT Total Equity Target	0	0	325,000	365,000	365,000	365,000	365,000	365,000

Exhibit 3c
4-Year 1-in-20 Combined Modified Scenario
Balance Sheet

(C$ 000s, except where noted)	For the Years Ended February,							
	2014A	2015A	2016A	2017P	2018P	2019P	2020P	2021P
BASIC								
Assets								
Cash and investments	76,166	55,508	29,114	10,911	9,255	9,854	9,561	9,386
Equity investments	1,948,658	2,061,262	2,083,349	2,108,669	2,222,247	2,246,641	2,301,111	2,410,393
Investment property	32,226	35,087	35,789	39,804	40,432	40,424	40,910	41,884
Due from other insurance companies	1,755	108	25	-	-	-	-	-
Accounts receivable	236,347	348,697	375,262	302,393	320,560	333,844	361,766	392,317
Prepaid expenses	-	-	-	-	-	-	-	-
Deferred policy acquisition costs	-	-	4,782	6,933	4,545	-	18,978	34,751
Reinsurers' share of unearned premiums	-	-	-	-	-	-	-	-
Reinsurers' share of unearned claims	17,625	2,565	998	-	-	-	-	-
Property and equipment	80,108	90,474	88,740	86,248	88,863	90,183	90,345	91,720
Deferred development costs	54,685	56,992	65,414	70,462	77,341	79,991	81,701	64,385
	2,447,570	**2,650,693**	**2,683,473**	**2,625,420**	**2,763,244**	**2,800,938**	**2,904,372**	**3,044,836**
Liabilities								
Due to other insurance companies	1,213	-	152	113	113	113	113	113
Accounts payable and accrued liabilities	35,769	34,157	38,860	29,447	30,993	31,499	32,418	33,959
Financing lease obligation	2,841	3,224	3,278	2,968	2,899	2,825	2,752	2,678
Unearned premiums and fees	402,982	426,137	453,389	475,671	508,213	532,903	583,854	639,732
Provision for employee current benefits	15,389	16,240	16,871	16,527	16,880	17,244	17,616	17,999
Provision for employee future benefits	235,172	286,581	281,209	286,836	302,414	319,313	336,739	354,910
Provision for unpaid claims	1,584,042	1,671,275	1,658,713	1,630,402	1,792,124	1,866,859	1,930,821	1,981,205
	2,277,408	**2,437,614**	**2,452,472**	**2,441,964**	**2,653,637**	**2,770,756**	**2,904,313**	**3,030,596**
Equity								
Retained earnings								
Basic Insurance Retained Earnings								
Rate Stabilization Reserve	99,878	177,817	194,496	147,431	79,821	19,856	(3,679)	16,766
Retained Earnings	-	(0)	0	-	-	-	-	-
	99,878	177,817	194,497	147,431	79,821	19,856	(3,679)	16,766
Accumulated Other Comprehensive Income	70,284	35,262	36,504	36,025	29,787	10,326	3,738	(2,526)
Total Equity	170,162	213,079	231,000	183,456	109,607	30,182	59	14,240
	-	-	-	-	-	-	-	-
	2,447,570	**2,650,693**	**2,683,473**	**2,625,420**	**2,763,244**	**2,800,938**	**2,904,372**	**3,044,836**

Exhibit 3d
4-Year 1-in-20 Combined Modified Scenario
Minimum Capital Test

(All figures in $000s)		2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021
		Current Year (01)	Forecast Year (02)	Forecast Year (03)	Forecast Year (04)	Forecast Year (05)
Capital Available:						
Capital available (from page 30.62 - capital available)	01	112,994	32,266	(49,809)	(81,642)	(50,145)
Phase-in of capital available	03	0	0	0	0	0
Total Capital Available	**09**	112,994	32,266	(49,809)	(81,642)	(50,145)
Assets Available:						
Net Assets Available (from page 30.92 - net assets available)	11	0	0	0	0	0
Phase-in of net assets available	13	0	0	0	0	0
Total Net Assets Available	**19**	0	0	0	0	0
Capital (Margin) Required at Target:						
Insurance Risk:						
Premium liabilities	20	81,838	87,331	91,540	100,140	109,835
Unpaid claims	22	171,660	188,449	196,373	203,572	208,837
Catastrophes	24	0	0	0	0	0
Margin required for reinsurance ceded to unregistered insurers	26	0	0	0	0	0
Subtotal: Insurance risk margin	29	253,498	275,780	287,913	303,712	318,672
Market Risk:						
Interest rate risk	30	16,545	38,090	30,034	30,207	28,770
Foreign exchange risk	32	18,184	21,677	16,385	16,036	13,594
Equity risk	34	136,252	162,834	131,281	127,676	137,646
Real estate risk	36	55,331	57,946	59,834	61,971	64,302
Other market risk exposures	38	0	0	0	0	0
Subtotal: Market risk margin	39	226,312	280,547	237,534	235,890	244,312
Credit Risk:						
Counterparty default risk for balance sheet assets	40	16,086	16,714	16,939	20,226	23,326
Counterparty default risk for off-balance sheet exposures	42	0	0	0	0	0
Counterparty default risk for unregistered reinsurance collateral and SIRs	44	0	0	0	0	0
Subtotal: Credit risk margin	49	16,086	16,714	16,939	20,226	23,326
Operational risk margin	50	65,455	73,592	72,127	76,157	81,206
Less: Diversification credit	52	66,402	76,657	72,368	74,419	77,910
Total Capital (Margin) Required at Target	59	494,949	569,976	542,145	561,566	589,606
Minimum Capital (Margin) Required (line 59 / 1.5)	60	329,966	379,984	361,430	374,377	393,071
Phase-in of Capital (Margin) Required	62	0	0	0	0	0
Total Minimum Capital (Margin) Required	69	329,966	379,984	361,430	374,377	393,071
Excess Capital (Net Assets Available) over Minimum Capital (Margin) Required	79	(216,972)	(347,718)	(411,239)	(456,019)	(443,216)
MCT (BAAT) Ratio (Line 09 or line 19 as a % of line 69)	90	34.24%	8.49%	-13.78%	-21.81%	-12.76%

Exhibit 3e
4-Year 1-in-20 Combined Modified Scenario
Net Claims Incurred Summary

(C$ 000s, except where noted)

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Claims Incurred before Financial Provisions						
Collision	353,144	392,835	418,769	448,144	503,088	506,206
Comprehensive	126,346	84,789	98,436	102,141	85,889	101,058
Property Damage	42,456	43,241	44,815	47,109	52,200	49,177
Public Liability - BI	5,744	4,232	4,919	5,398	4,602	2,662
PIPP	115,221	127,255	276,754	210,444	207,156	211,160
Total	**642,912**	**652,351**	**843,693**	**813,236**	**852,935**	**870,263**
Unallocated Loss Adjustment Expenses	40,148	39,919	41,338	42,939	44,916	46,857
Change in Internal Loss Adjustment Expense Provision	503	(5,709)	19,472	6,267	5,660	3,908
Change in Reinsurance Ceded Provision	(1,076)	0	0	0	0	0
Other Financial Adjustments	(1,124)	0	0	0	0	0
Change in DPAC / Premium Deficiency Provision	(14,959)	(4,792)	4,141	7,045	(17,349)	(12,610)
Total Net Claims Incurred	**666,404**	**681,770**	**908,644**	**869,488**	**886,161**	**908,418**

Exhibit 3f

4-Year 1-in-20 Combined Modified Scenario

Deferred Policy Acquisition Expenses and Premium Deficiency

A. Claims (Including External Adjustment Expense) Data

		Accident Year										Selected	Selected
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Undisc	Disc
1.	Ultimate Loss Ratio - Total All Coverage	70.49%	77.72%	83.83%	73.78%	78.00%	76.26%	76.56%	77.15%	74.96%	69.84%		
2.	Trend/Rate Adjustment for Fiscal Year												
	2015	0.9933	0.9552	0.9341	0.9491	0.9854							
	2016		0.9408	0.9212	0.9371	0.9740	0.9998						
	2017			0.9113	0.9224	0.9540	0.9745	0.9951					
	2018				0.9520	0.9766	0.9894	1.0019	1.0114				
	2019					0.9301	0.9419	0.9535	0.9622	0.9883			
	2020						0.8950	0.9065	0.9153	0.9407	0.9878		
3.	Adjusted Loss Ratio for Fiscal Year [(1) x (2)]												
	2015	70.02%	74.24%	78.31%	70.02%	76.86%						73.71%	78.15%
	2016		73.12%	77.23%	69.13%	75.97%	76.24%					75.11%	78.85%
	2017			76.39%	68.05%	74.41%	74.31%	76.19%				74.97%	79.54%
	2018				70.24%	76.17%	75.44%	76.71%	78.03%			76.11%	80.71%
	2019					72.54%	71.83%	73.00%	74.23%	74.08%		73.21%	77.64%
	2020						68.25%	69.41%	70.61%	70.51%	68.99%	69.64%	73.83%

B. Actual Data Other Than Losses

		Fiscal Year									
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
4.	Net Earned Premium	761,677	756,751	764,671	802,743	861,065	912,195	965,997	1,019,729	1,095,661	1,202,952
5.	Operating Expenses as % of Earned Premium	9.70%	10.82%	11.1%	11.1%	10.8%	10.3%	9.8%	9.9%	9.3%	8.9%
6.	Maintenance Expense Rate [(5) x 1/3]	3.23%	3.61%	3.69%	3.69%	3.61%	3.42%	3.27%	3.29%	3.10%	2.96%
	Selected					3.66%	3.57%	3.43%	3.33%	3.22%	3.12%
7.	ILAE Ratio to Losses - Selected					19.00%	19.00%	19.00%	19.00%	19.00%	19.00%

C. Equity in Unearned Premium

		2015	2016	2017	2018	2019	2020
8.	Net Unearned Premium	417,518	437,504	466,869	488,116	535,337	587,171
9.	Additional Expected Cost of Non-Proportional Reinsurance	5,816	5,938	6,057	6,178	6,302	6,428
10.	Expected Claims (Including Ext Adj Expenses) [((8) - (9)) x (3)]	325,991	340,301	366,546	388,987	410,730	428,778
11.	Reinsurance PFAD	-	-	-	-	-	-
12.	Maintenance Expense [a]	14,727	15,410	15,813	16,026	17,026	18,100
13.	Internal Loss Adjustment Expense [Sheet 1, Row 11]	61,938	64,657	69,644	73,908	78,039	81,468
14.	Expected Claims (Including Ext Adj Expenses) - PIPP Enhancement	4,264	4,264	4,264	4,264	4,264	4,264
15.	Equity in Unearned Premium [(8) - Sum((9) to (14))]	4,782	6,933	4,545	(1,246)	18,978	48,134
16.	Carried Deferred Policy Acquisition Expenses	28,347	25,706	27,459	28,713	31,587	34,751
17.	Write Down Deferred Policy Acquisition Expenses [b]	23,565	18,773	22,913	28,713	12,610	-
	Change	(3,009)	(4,792)	4,141	5,799	(16,103)	(12,610)
18.	Premium Deficiency [c]	-	-	-	1,246	-	-
	Change	(11,950)	-	-	1,246	(1,246)	-

Notes:

[a] ((8) - (9)) x (6) x Discount to Valuation Date Without Margin

[b] Min((16) - (15), (16)) if greater than 0, otherwise 0

[c] Negative of (15) if greater than 0, otherwise 0

Manitoba Public Insurance

Exhibit 3g
4-Year 1-in-20 Combined Modified Scenario
Summary of Corporate Investment Income

	2016/17	2017/18	2018/19 Forecasted	2019/20	2020/21
Interest Income During Period					
Cash/Short Term Investments	42	0	(0)	0	0
Marketable Bonds	37,772	33,253	33,098	34,072	35,142
MUSH	28,949	28,707	28,147	27,474	26,768
Total	**66,763**	**61,960**	**61,245**	**61,546**	**61,910**
Dividend and other Income					
Canadian Equities	9,121	10,793	9,663	8,548	8,950
US Equities	4,386	5,682	5,073	4,580	4,852
Investment Properties (Cityplace)	3,431	2,149	4,952	4,873	4,771
Infrastructure	1,268	1,721	1,828	1,931	2,039
Total	**18,206**	**20,345**	**21,516**	**19,932**	**20,611**
Gains During Period - Profit & Loss					
Marketable Bonds Unrealized Gains/(Loss)	(66,955)	58,662	1,501	1,653	1,725
Marketable Bonds Realized Gains/(Loss)	(8,785)	18,196	(1,501)	(1,653)	(1,725)
Amortization on Marketable Bonds (Prem) / Discount	(6,460)	(7,018)	(8,960)	(9,866)	(10,299)
MUSH	-	-	-	-	-
Canadian Equities Realized Gains	11,065	4,925	8,227	2,477	(91)
US Equities Realized Gains	7,075	-	11,302	2,842	-
Real Estate (Pooled Fund)	12,618	14,271	14,667	15,547	16,480
Infrastructure	4,971	6,740	7,164	7,566	7,989
Total	**(46,470)**	**95,775**	**32,401**	**18,565**	**14,079**
Other					
Investment Fees Paid	(4,449)	(4,620)	(4,733)	(4,971)	(5,256)
Pension Expense	(14,401)	(15,071)	(15,763)	(16,483)	(17,235)
Investment Write-Down	-	-	-	-	-
Total	**(18,850)**	**(19,691)**	**(20,496)**	**(21,454)**	**(22,491)**
Total Corporate Investment Income	**19,649**	**158,389**	**94,666**	**78,588**	**74,109**
Total Basic Investment Income	16,794	134,063	79,168	65,019	60,974
% - Basic to Total Investment Income	85%	85%	84%	83%	82%
Equity Unrealized Gains/(Losses)					
Canadian Equities Unrealized Gains	10,443	(1,495)	(2,488)	(1,867)	(7,058)
US Equities Unrealized Gains	6,619	(536)	(827)	(644)	(622)
Total Corporate Unrealized Gains/(Losses)	**17,062**	**(2,031)**	**(3,315)**	**(2,510)**	**(7,680)**

Ending Values and Allocations

	2016/17	2017/18	2018/19 Forecasted	2019/20	2020/21
Ending Asset Values for Corporate ($Millions)					
Cash/Short Term Investments	-	-	-	-	-
Canadian Fixed Income	1,091.8	1,100.7	1,265.0	1,349.4	1,455.6
MUSH	643.8	658.8	669.9	678.0	683.8
Canadian Equities	273.0	332.8	249.7	238.7	263.9
US Equities	154.3	184.7	143.8	138.9	154.8
Real Estate	277.5	292.7	308.1	324.9	343.3
Infrastructure & Venture Capital	112.3	130.1	137.2	144.8	152.8
Total Corporate Assets	**2,552.7**	**2,699.8**	**2,773.7**	**2,874.7**	**3,054.2**
Total Basic Assets	2,159.4	2,271.9	2,296.9	2,351.6	2,461.7
Ending Rebalanced Allocations (%)					
Cash/Short Term Investments	0.0%	0.0%	0.0%	0.0%	0.0%
Canadian Fixed Income	42.8%	40.8%	45.6%	46.9%	47.7%
MUSH	25.2%	24.4%	24.2%	23.6%	22.4%
Canadian Equities	10.7%	12.3%	9.0%	8.3%	8.6%
US Equities	6.0%	6.8%	5.2%	4.8%	5.1%
Real Estate	10.9%	10.8%	11.1%	11.3%	11.2%
Infrastructure & Venture Capital	4.4%	4.8%	4.9%	5.0%	5.0%
Total Corporate	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Exhibit 4a
4-Year 1-in-40 Combined Modified Scenario
Statement of Operations

(C$ 000s, except where noted)	*For the Years Ended February,*							
	2014A	**2015A**	**2016A**	**2017P**	**2018P**	**2019P**	**2020P**	**2021P**
BASIC								
Motor Vehicles	756,642	794,052	854,170	893,420	954,331	997,909	1,097,814	1,207,764
Drivers	41,520	44,642	46,619	50,393	52,908	55,180	57,424	59,626
Reinsurance Ceded	(13,422)	(13,829)	(12,423)	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Written	**784,741**	**824,865**	**888,365**	**932,181**	**995,362**	**1,040,976**	**1,142,881**	**1,254,786**
Net Premiums Earned								
Motor Vehicles	741,077	774,784	827,701	875,348	926,228	977,803	1,051,720	1,157,035
Drivers	37,015	42,926	45,787	48,478	51,645	54,039	56,298	58,521
Reinsurance Ceded	(13,422)	(13,829)	(12,423)	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Earned	**764,671**	**803,880**	**861,065**	**912,195**	**965,997**	**1,019,729**	**1,095,661**	**1,202,952**
Service Fees & Other Revenues	20,383	19,475	20,351	21,557	23,227	24,999	26,965	29,191
Total Earned Revenues	**785,053**	**823,356**	**881,416**	**933,752**	**989,224**	**1,044,728**	**1,122,626**	**1,232,143**
Net Claims Incurred	747,435	745,837	666,404	681,770	823,920	914,712	897,763	936,142
Claims Expense	114,552	116,578	118,614	125,191	128,312	133,284	141,700	149,099
Road Safety/Loss Prevention	12,816	11,359	13,027	13,318	13,210	14,131	14,192	14,349
Total Claims Costs	**874,803**	**873,773**	**798,045**	**820,279**	**965,442**	**1,062,128**	**1,053,655**	**1,099,590**
Expenses								
Operating	67,982	74,283	71,641	76,908	78,026	82,607	83,906	88,806
Commissions	32,058	32,845	33,862	35,616	37,376	39,402	41,903	45,588
Premium Taxes	23,343	24,531	26,205	27,715	29,336	30,955	33,241	36,467
Regulatory/Appeal	3,766	3,935	3,675	3,421	3,494	3,567	3,642	3,720
Total Expenses	**127,148**	**135,594**	**135,383**	**143,661**	**148,232**	**156,531**	**162,692**	**174,581**
Underwriting Income (Loss)	**(216,898)**	**(186,011)**	**(52,012)**	**(30,188)**	**(124,450)**	**(173,930)**	**(93,721)**	**(42,027)**
Investment Income	147,735	188,451	(4,038)	16,794	115,272	88,825	65,129	37,820
Net Income (Loss) from Operations	**(69,163)**	**2,440**	**(56,050)**	**(18,186)**	**(17,217)**	**(76,985)**	**(37,458)**	**(14,194)**
DPAC / Premium Deficiency writedown Adj.	-	-	-	(4,792)	(8,040)	8,121	(8,867)	(9,987)
Net Income (Loss)	**(69,163)**	**2,440**	**(56,050)**	**(13,394)**	**(9,177)**	**(85,106)**	**(28,592)**	**(4,207)**

Exhibit 4b
4-Year 1-in-40 Combined Modified Scenario
Statement of Changes in Equity

(C$ 000s, except where noted)

	For the Years Ended February,							
	2014A	2015A	2016A	2017P	2018P	2019P	2020P	2021P
Retained Earnings								
Beginning Balance	169,039	99,877	177,817	194,497	170,528	168,851	73,995	39,403
Net Income (Loss) from annual operations	(69,163)	2,440	(56,050)	(13,394)	(9,177)	(85,106)	(28,592)	(4,207)
Premium Rebate	-	-	-	-	-	-	-	-
Transfer (to) / from Non-Basic Retained Earnings	-	75,500	72,730	(10,575)	7,500	(9,750)	(6,000)	(26,000)
Total Retained Earnings	**$ 99,876**	**$ 177,817**	**$ 194,497**	**$ 170,528**	**$ 168,851**	**$ 73,995**	**$ 39,403**	**$ 9,196**
Retained Earnings								
DCAT Equity Reserve	99,877	177,817	194,496	170,528	168,851	73,995	39,403	9,196
Excess Retained Earnings	-	(0)	0	-	-	-	-	-
Total Retained Earnings	**$ 99,877**	**$ 177,817**	**$ 194,497**	**$ 170,528**	**$ 168,851**	**$ 73,995**	**$ 39,403**	**$ 9,196**
Total Accumulated Other Comprehensive Income								
Beginning Balance	56,800	70,284	35,262	36,504	36,025	23,144	6,054	(7,792)
Other Comprehensive Income for the Year	13,484	(35,022)	1,242	(479)	(12,881)	(17,090)	(13,846)	(1,416)
Total Accumulated Other Comprehensive Income	**$ 70,284**	**$ 35,262**	**$ 36,504**	**$ 36,025**	**$ 23,144**	**$ 6,054**	**$ (7,792)**	**$ (9,208)**
Total Equity Balance	**$ 170,160**	**$ 213,079**	**$ 231,000**	**$ 206,553**	**$ 191,994**	**$ 80,049**	**$ 31,611**	**$ (12)**

RESERVE TARGETS

PUB RSR Target	172,000	172,000	194,000	194,000	194,000	194,000	194,000	194,000
DCAT Total Equity Target	0	213,000	231,000	231,000	231,000	231,000	231,000	231,000
MCT Total Equity Target	0	0	325,000	365,000	365,000	365,000	365,000	365,000

Exhibit 4c
4-Year 1-in-40 Combined Modified Scenario
Balance Sheet

(C$ 000s, except where noted)	*For the Years Ended February,*							
	2014A	**2015A**	**2016A**	**2017P**	**2018P**	**2019P**	**2020P**	**2021P**
BASIC								
Assets								
Cash and investments	76,166	55,508	29,114	11,028	9,724	9,886	9,789	9,519
Equity investments	1,948,658	2,061,262	2,083,349	2,131,223	2,251,072	2,294,944	2,336,112	2,412,471
Investment property	32,226	35,087	35,789	40,229	40,940	40,965	41,441	42,361
Due from other insurance companies	1,755	108	25	-	-	-	-	-
Accounts receivable	236,347	348,697	375,262	302,393	320,560	333,844	361,766	392,317
Prepaid expenses	-	-	-	-	-	-	-	-
Deferred policy acquisition costs	-	-	4,782	6,933	16,726	9,859	21,600	34,751
Reinsurers' share of unearned premiums	-	-	-	-	-	-	-	-
Reinsurers' share of unearned claims	17,625	2,565	998	-	-	-	-	-
Property and equipment	80,108	90,474	88,740	86,248	88,863	90,183	90,345	91,720
Deferred development costs	54,685	56,992	65,414	70,462	77,341	79,991	81,701	64,385
	2,447,570	**2,650,693**	**2,683,473**	**2,648,516**	**2,805,226**	**2,859,671**	**2,942,755**	**3,047,524**
Liabilities								
Due to other insurance companies	1,213	-	152	113	113	113	113	113
Accounts payable and accrued liabilities	35,769	34,157	38,860	29,447	30,993	31,499	32,418	33,959
Financing lease obligation	2,841	3,224	3,278	2,968	2,899	2,825	2,752	2,678
Unearned premiums and fees	402,982	426,137	453,389	475,671	508,213	532,903	583,854	639,732
Provision for employee current benefits	15,389	16,240	16,871	16,527	16,880	17,244	17,616	17,999
Provision for employee future benefits	235,172	286,581	281,209	286,836	302,414	319,313	336,739	354,910
Provision for unpaid claims	1,584,042	1,671,275	1,658,713	1,630,402	1,751,719	1,875,725	1,937,652	1,998,145
	2,277,408	**2,437,614**	**2,452,472**	**2,441,964**	**2,613,232**	**2,779,622**	**2,911,144**	**3,047,536**
Equity								
Retained earnings								
Basic Insurance Retained Earnings								
Rate Stabilization Reserve	99,878	177,817	194,496	170,528	168,851	73,995	39,403	9,196
Retained Earnings	-	(0)	0	-	-	-	-	-
	99,878	177,817	194,497	170,528	168,851	73,995	39,403	9,196
Accumulated Other Comprehensive Income	70,284	35,262	36,504	36,025	23,144	6,054	(7,792)	(9,208)
Total Equity	**170,162**	**213,079**	**231,000**	**206,553**	**191,994**	**80,049**	**31,611**	**(12)**
	-	-	-	-	-	-	-	-
	2,447,570	2,650,693	2,683,473	2,648,516	2,805,226	2,859,671	2,942,755	3,047,524

Exhibit 4d
4-Year 1-in-40 Combined Modified Scenario
Minimum Capital Test

(All figures in $000s)		2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021
		Current Year (01)	Forecast Year (02)	Forecast Year (03)	Forecast Year (04)	Forecast Year (05)
Capital Available:						
Capital available (from page 30.62 - capital available)	01	136,091	114,653	58	(50,089)	(64,397)
Phase-in of capital available	03	0	0	0	0	0
Total Capital Available	**09**	136,091	114,653	58	(50,089)	(64,397)
Assets Available:						
Net Assets Available (from page 30.92 - net assets available)	11	0	0	0	0	0
Phase-in of net assets available	13	0	0	0	0	0
Total Net Assets Available	**19**	0	0	0	0	0
Capital (Margin) Required at Target:						
Insurance Risk:						
Premium liabilities	20	81,838	87,331	91,306	100,140	109,835
Unpaid claims	22	171,660	183,743	197,373	204,369	210,899
Catastrophes	24	0	0	0	0	0
Margin required for reinsurance ceded to unregistered insurers	26	0	0	0	0	0
Subtotal: Insurance risk margin	29	253,498	271,074	288,679	304,509	320,734
Market Risk:						
Interest rate risk	30	14,611	29,148	31,801	27,930	29,272
Foreign exchange risk	32	18,379	21,183	18,186	16,202	12,505
Equity risk	34	137,709	160,145	147,691	129,547	133,056
Real estate risk	36	55,831	58,562	60,513	62,658	64,929
Other market risk exposures	38	0	0	0	0	0
Subtotal: Market risk margin	39	226,530	269,038	258,191	236,337	239,762
Credit Risk:						
Counterparty default risk for balance sheet assets	40	16,089	17,944	17,926	20,494	23,330
Counterparty default risk for off-balance sheet exposures	42	0	0	0	0	0
Counterparty default risk for unregistered reinsurance collateral and SIRs	44	0	0	0	0	0
Subtotal: Credit risk margin	49	16,089	17,944	17,926	20,494	23,330
Operational risk margin	50	65,474	72,319	74,032	76,286	80,995
Less: Diversification credit	52	66,433	74,700	75,628	74,621	77,397
Total Capital (Margin) Required at Target	59	495,158	555,675	563,200	563,005	587,424
Minimum Capital (Margin) Required (line 59 / 1.5)	60	330,105	370,450	375,466	375,336	391,616
Phase-in of Capital (Margin) Required	62	0	0	0	0	0
Total Minimum Capital (Margin) Required	69	330,105	370,450	375,466	375,336	391,616
Excess Capital (Net Assets Available) over Minimum Capital (Margin) Required	79	(194,014)	(255,797)	(375,408)	(425,425)	(456,013)
MCT (BAAT) Ratio (Line 09 or line 19 as a % of line 69)	90	41.23%	30.95%	0.02%	-13.35%	-16.44%

Manitoba Public Insurance

Exhibit 4e
4-Year 1-in-40 Combined Modified Scenario
Net Claims Incurred Summary

(C$ 000s, except where noted)

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Claims Incurred before Financial Provisions						
Collision	353,144	392,835	387,446	445,175	494,536	514,765
Comprehensive	126,346	84,789	88,326	109,027	104,919	111,105
Property Damage	42,456	43,241	42,036	46,636	49,302	51,452
Public Liability - BI	5,744	4,232	5,240	6,567	5,249	3,398
PIPP	115,221	127,255	253,592	243,454	202,487	213,093
Total	**642,912**	**652,351**	**776,639**	**850,859**	**856,493**	**893,813**
Unallocated Loss Adjustment Expenses	40,148	39,919	41,338	42,939	44,916	46,857
Change in Internal Loss Adjustment Expense Provision	503	(5,709)	13,982	12,794	5,221	5,459
Change in Reinsurance Ceded Provision	(1,076)	0	0	0	0	0
Other Financial Adjustments	(1,124)	0	0	0	0	0
Change in DPAC / Premium Deficiency Provision	(14,959)	(4,792)	(8,040)	8,121	(8,867)	(9,987)
Total Net Claims Incurred	**666,404**	**681,770**	**823,920**	**914,712**	**897,763**	**936,142**

Exhibit 4f
4-Year 1-in-40 Combined Modified Scenario
Deferred Policy Acquisition Expenses and Premium Deficiency

A. Claims (Including External Adjustment Expense) Data

		Accident Year										Selected	Selected
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Undisc	Disc
1.	Ultimate Loss Ratio - Total All Coverage	70.49%	77.72%	83.83%	73.78%	78.00%	76.26%	72.00%	78.39%	75.49%	71.72%		
2.	Trend/Rate Adjustment for Fiscal Year												
	2015	0.9933	0.9552	0.9341	0.9491	0.9854							
	2016		0.9408	0.9212	0.9371	0.9740	0.9998						
	2017			0.8992	0.9128	0.9467	0.9698	0.9930					
	2018				0.9451	0.9710	0.9852	0.9992	1.0103				
	2019					0.9267	0.9392	0.9515	0.9609	0.9877			
	2020						0.8982	0.9091	0.9172	0.9419	0.9884		
3.	Adjusted Loss Ratio for Fiscal Year [(1) x (2)]												
	2015	70.02%	74.24%	78.31%	70.02%	76.86%						73.71%	78.15%
	2016		73.12%	77.23%	69.13%	75.97%	76.24%					75.11%	78.85%
	2017			75.38%	67.34%	73.84%	73.95%	71.49%				73.09%	77.32%
	2018				69.73%	75.73%	75.13%	71.94%	79.20%			74.27%	78.78%
	2019					72.28%	71.62%	68.50%	75.33%	74.56%		72.82%	77.22%
	2020						68.50%	65.46%	71.90%	71.11%	70.89%	70.16%	74.39%

B. Actual Data Other Than Losses

		Fiscal Year									
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
4.	Net Earned Premium	761,677	756,751	764,671	802,743	861,065	912,195	965,997	1,019,729	1,095,661	1,202,952
5.	Operating Expenses as % of Earned Premium	9.70%	10.82%	11.1%	11.1%	10.8%	10.3%	9.8%	9.8%	9.3%	8.9%
6.	Maintenance Expense Rate [(5) x 1/3]	3.23%	3.61%	3.69%	3.69%	3.61%	3.42%	3.27%	3.28%	3.10%	2.96%
	Selected					3.66%	3.57%	3.43%	3.32%	3.21%	3.11%
7.	ILAE Ratio to Losses - Selected					19.00%	19.00%	19.00%	19.00%	19.00%	19.00%

C. Equity in Unearned Premium

		2015	2016	2017	2018	2019	2020
8.	Net Unearned Premium	417,518	437,504	466,869	488,116	535,337	587,171
9.	Additional Expected Cost of Non-Proportional Reinsurance	5,816	5,938	6,057	6,178	6,302	6,428
10.	Expected Claims (Including Ext Adj Expenses) [((8) - (9)) x (3)]	325,991	340,301	356,311	379,667	408,547	432,015
11.	Reinsurance PFAD	-	-	-	-	-	-
12.	Maintenance Expense [a]	14,727	15,410	15,813	16,012	17,000	18,067
13.	Internal Loss Adjustment Expense [Sheet 1, Row 11]	61,938	64,657	67,699	72,137	77,624	82,083
14.	Expected Claims (Including Ext Adj Expenses) - PIPP Enhancement	4,264	4,264	4,264	4,264	4,264	4,264
15.	Equity in Unearned Premium [(8) - Sum((9) to (14))]	4,782	6,933	16,726	9,859	21,600	44,314
16.	Carried Deferred Policy Acquisition Expenses	28,347	25,706	27,459	28,713	31,587	34,751
17.	Write Down Deferred Policy Acquisition Expenses [b]	23,565	18,773	10,733	18,854	9,987	-
	Change	(3,009)	(4,792)	(8,040)	8,121	(8,867)	(9,987)
18.	Premium Deficiency [c]	-	-	-	-	-	-
	Change	(11,950)	-	-	-	-	-

Notes:

[a] ((8) - (9)) x (6) x Discount to Valuation Date Without Margin

[b] Min((16) - (15), (16)) if greater than 0, otherwise 0

[c] Negative of (15) if greater than 0, otherwise 0

Manitoba Public Insurance

Exhibit 4g
4-Year 1-in-40 Combined Modified Scenario
Summary of Corporate Investment Income

	2016/17	2017/18	2018/19	2019/20	2020/21
			Forecasted		
Interest Income During Period					
Cash/Short Term Investments	42	(0)	(0)	0	(0)
Marketable Bonds	37,772	34,196	33,162	34,304	35,336
MUSH	28,949	28,741	28,238	27,560	26,849
Total	**66,763**	**62,937**	**61,399**	**61,864**	**62,185**
Dividend and other Income					
Canadian Equities	9,121	10,418	10,602	8,958	8,439
US Equities	4,386	5,496	5,482	4,732	4,746
Investment Properties (Cityplace)	3,431	2,149	4,952	4,873	4,771
Infrastructure	1,268	1,721	1,828	1,931	2,039
Total	**18,206**	**19,784**	**22,863**	**20,494**	**19,995**
Gains During Period - Profit & Loss					
Marketable Bonds Unrealized Gains/(Loss)	(66,955)	42,550	19,906	1,645	1,728
Marketable Bonds Realized Gains/(Loss)	(8,785)	11,561	2,309	(1,645)	(1,728)
Amortization on Marketable Bonds (Prem) / Discount	(6,460)	(6,309)	(8,430)	(9,819)	(10,316)
MUSH	-	-	-	-	-
Canadian Equities Realized Gains	11,065	3,857	2,255	(985)	(28,044)
US Equities Realized Gains	7,075	-	4,063	5,138	-
Real Estate (Pooled Fund)	12,618	14,271	14,667	15,547	16,480
Infrastructure	4,971	6,740	7,164	7,566	7,989
Total	**(46,470)**	**72,669**	**41,934**	**17,446**	**(13,891)**
Other					
Investment Fees Paid	(4,449)	(4,620)	(4,733)	(4,971)	(5,256)
Pension Expense	(14,401)	(15,071)	(15,763)	(16,483)	(17,235)
Investment Write-Down	-	-	-	-	-
Total	**(18,850)**	**(19,691)**	**(20,496)**	**(21,454)**	**(22,491)**
Total Corporate Investment Income	**19,649**	**135,700**	**105,701**	**78,350**	**45,798**
Total Basic Investment Income	16,794	115,272	88,825	65,129	37,820
% - Basic to Total Investment Income	85%	85%	84%	83%	83%
Equity Unrealized Gains/(Losses)					
Canadian Equities Unrealized Gains	10,443	(7,254)	(9,163)	(8,263)	(26,282)
US Equities Unrealized Gains	6,619	(3,792)	(4,560)	(4,162)	(3,539)
Total Corporate Unrealized Gains/(Losses)	**17,062**	**(11,046)**	**(13,723)**	**(12,425)**	**(29,821)**

Ending Values and Allocations

	2016/17	2017/18	2018/19	2019/20	2020/21
			Forecasted		
Ending Asset Values for Corporate ($Millions)					
Cash/Short Term Investments	-	-	-	-	-
Canadian Fixed Income	1,091.8	1,120.4	1,228.3	1,354.8	1,449.7
MUSH	643.8	658.8	669.9	678.0	683.8
Canadian Equities	273.0	320.7	289.2	240.1	243.3
US Equities	154.3	178.3	162.8	138.4	150.1
Real Estate	277.5	292.7	308.1	324.9	343.3
Infrastructure & Venture Capital	112.3	130.1	137.2	144.8	152.8
Total Corporate Assets	**2,552.7**	**2,700.9**	**2,795.6**	**2,880.9**	**3,023.0**
Total Basic Assets	**2,182.5**	**2,301.7**	**2,345.8**	**2,387.3**	**2,464.4**
Ending Rebalanced Allocations (%)					
Cash/Short Term Investments	0.0%	0.0%	0.0%	0.0%	0.0%
Canadian Fixed Income	42.8%	41.5%	43.9%	47.0%	48.0%
MUSH	25.2%	24.4%	24.0%	23.5%	22.6%
Canadian Equities	10.7%	11.9%	10.3%	8.3%	8.0%
US Equities	6.0%	6.6%	5.8%	4.8%	5.0%
Real Estate	10.9%	10.8%	11.0%	11.3%	11.4%
Infrastructure & Venture Capital	4.4%	4.8%	4.9%	5.0%	5.1%
Total Corporate	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

PUB (MPI) 2-12

Volume:	PUB/MPI 1-27, PUB/MPI 1-31,PUB/MPI 1-38	Page No.:	
Topic:	Expenses		
Sub Topic:	IT Expenses		
Issue:	External Labour		

Preamble: The Corporation indicates that it will internalize 11 IT positions in 2016/17 with a savings of $1.2 million. The schedule in response to PUB/MPI 1-38 does not appear to reflect this planned savings.

The Corporation's continuity schedule of internal versus external FTE positions provided in response to PUB/MPI 1-27 reflects an increase in internal IT staff from 223 FTE in 2015/16 to 235.7 FTE in 2016/17, an increase of 12.7 FTE. The schedule also shows an increase in Consultants from 114 FTE in 2015/16 to 116 FTE in 2016/17. It does not reflect a reduction in the number of external consultants in 2016/17.

Question:

a) Please update and expand the schedule provided in PUB/MPI 1-38 to reflect the forecasted savings of $1.2 million of the remaining 11 internal FTE into normal operations in 2016/17.

b) Please reconcile and explain how MPI is realizing a savings of $1.2 million in 2016/17 in internalizing 11 IT staff in that year, when there appears to be no reduction in the use of external IT consultants for the year.

Rationale for Question:

To reconcile changes in payroll and test the reasonableness of cost reductions.

RESPONSE:

a) There are no net operational expense savings anticipated in 2016/17 fiscal year. In *PUB (MPI) 1-31*, Manitoba Public Insurance (MPI) stated "Due to timing associated with transitioning the positions from external consultants to internal staff, the full $2.4 million in cash savings would be realized in 2019/20; made up of $1.2 million from the 2016/17 hires, $1.1 million from the 2017/18 hire and $0.1 million from the 2018/19 hires." This shows that the end savings ($2.4M) was the sum of benefits resulting from annual actions taken in the preceding years and was not an amendment to the savings schedule noted in *Volume I IT page 12*. New staff hired in 2016/17 will work in parallel to existing consultants while knowledge is transferred. Net operational expense savings occur once the knowledge transfer is complete and the consultant is released (this can take between 6 and 24 months depending on the position and the candidate selected). In year savings (2016/17) are anticipated from potential situations where an existing consultant joins (converts to) MPI. Those savings are anticipated to be offset by the additional internal labour cost of new hires who will not complete knowledge transfer (and thus achieve net operational expense savings) until 2017/18 or 2018/19.

b) Please see *Volume I IT page 12, lines 12 -16*.

PUB (MPI) 2-13

Volume:	PUB/MPI 1-27(b)	Page No.:	
Topic:	Expenses		
Sub Topic:			
Issue:	IT Expenses		

Question:

a) Please update the response to include actual internal and external consultant costs for the years 2011/12 through 2015/16.

b) Please indicate the extent to which the external consultant costs are capitalized versus expensed in each of the years.

Rationale for Question:

To understand the impact of consultant expenses on Basic.

RESPONSE:

a) The stated rationale for this question is to understand impacts to Basic, and in response the Corporation has provided the following table below, which is understood to be responsive to the intent of the question:

Basic Internal and External Consulting Costs

Year	2011/12	2012/13	2013/14	2014/15	2015/16
*Internal FTE Costs ($)	14,131	15,234	15,504	14,070	14,906
Consultant Costs ($)	7,288	18,344	29,396	14,553	17,214
Total	**21,419**	**33,578**	**44,900**	**28,623**	**32,120**

(C$ 000s, except where noted)

***Basic amount estimated at an 80 % allocation to Corporate.**
NOTE: In response PUB 1-27, corporate amounts were provided.

The Corporation notes that the *PUB (MPI) 1-27*, and its predecessor question in the 2016 GRA, requested information on Corporate basis, which was provided.

b) Consultant costs are based on deferred development costs which are classified as 100% capital.

PUB (MPI) 2-14

Volume:	**PUB/MPI 1-33**	**Page No.:**	
Topic:	**Expenses**		
Sub Topic:			
Issue:	**Deferred Development Costs**		

Preamble: Some of the detail of project costs does not agree with the total project costs, in particular New Call Management, IT Optimization, Disaster Recovery and HR Management Phase I & 2. The schedule does not reflect all spending on each of these projects.

Question:

a) Please reconcile the total project deferred development costs and spending for the first four of the projects listed.

b) Please explain why HR Management System Phase 3 & 4 commencement is being delayed to 2018/19.

Rationale for Question:

To assess the IT Project expenses.

RESPONSE:

a) Included in the totals are costs incurred prior to 2011/12. As well, the main differences are due to fluctuations in the percentage allocated to Basic annually versus percentage allocated to Basic at the end of the project which determines the Total Project Deferred Development values shown.

b) Human Resource Management System (HRMS) 3/4 is delayed until 2017/18 because it is dependent on the implementation of both the Infor/Lawson Upgrade and Corporate Learning Management System projects.

PUB (MPI) 2-15

Volume:	PUB/MPI 1-33, EXP. Appendix 13, PF.2	Page No.:	
Topic:	Expenses		
Sub Topic:	IT Expenses		
Issue:	Deferred Development Costs		

Preamble: The yearly change in in the balance of deferred development costs (Capital Additions less Amortization) does not appear to reconcile with the reported year end balances in PF.2.

Question:

Please provide a continuity schedule (by project) in support of the deferred development costs reflected on the Statement of Financial Position (PF.2) for each of the years 2016 through 2021 Outlook. Please use the unamortized balance of each project 2015/16 actual as a starting point, in the following format:

Project	Balance 2015/16 PF.2	Capital Spending (Appendix 13)	Amortization (Appendix 13)	Balance 2016/17 (PF.2)
	[a]	[b]	[c]	[d] = [a]+[b]-[c]
Total	**65,414**	**20,617**	**12,666**	**70,462**

The detail of the capital cost and amortization should reconcile with the reported balance on the Statement of Financial Position.

Rationale for Question:

To understand changes in the balance of Deferred Development Costs as they relate to Basic.

RESPONSE:

The model construct for the deferred development line item on the Basic Statement of Financial Position is based on an allocated assumption (historical average) rather than directly calculated per project as provided in *PUB (MPI) 1-33* and *Volume II EXP Appendices Appendix 13*. This is based on initial set up of the Financial Forecasting Model (FFM). The FFM is currently undergoing modifications related to the 2018 General Rate Application (GRA) and this line item will be revised to reflect direct project costs rather than based on an allocation moving forward. This update/improvement will be reflected in the 2018 GRA. Please note the impact, related to this variance, on rate setting is negligible.

PUB (MPI) 2-16

Volume:	PUB/MPI 1-34	Page No.:	
Topic:	IT Expenses		
Sub Topic:			
Issue:	Deferred Development Costs		

Question:

Please advise as to when the Corporation anticipates filing the business charter given the approval process being followed.

Rationale for Question:

To assess the reasonableness of budgeted capital expenses.

RESPONSE:

Please see Attachment A.

Manitoba
Public Insurance

Technology Modernization Program Charter

Version: 1.0
Date: September 7, 2016

Table of Contents

1 INTRODUCTION

This Program Charter summarizes the business and management aspects of the Technology Modernization Program. When signed by the sponsor(s), this charter serves as an agreement between the business and the project groups, formally authorizing the existence of the project, and gives authorization for the Project Manager to engage resources in the planning and execution of the project activities based on the conditions established.

2 PROGRAM PURPOSE

MPI recognizes the need to continue to invest in its technical assets, to avoid technology obsolescence, and to achieve the goals identified in the Corporate Strategic plan.

Information Technology focused investments are proposed annually to improve:

Technology Risk Management – to provide regular investment in technology systems and processes to avoid significant capital outlays in future years by ensuring that existing technologies stay on current, supported versions and other technology risks are addressed through process and technology improvements;

Technology Innovation and Capabilities – to build upon the foundation created through previous capital investments such as the recently completed the Information Technology Optimization (ITO) program by investing in new or expanded capabilities of staff and systems.

3 PROGRAM OBJECTIVES

Technology Risk Management

The goal of the Technology Risk Management aspect of the program is to implement projects that will keep existing technology in a stable and supported state and address other technology based risks through process and technology improvements. Return on investment will be realized through risk reduction and risk mitigation. This includes reduced risk of running on unsupported or outdated technologies and reducing risks identified in various risk assessments. Improvements are focused on the following areas:

- Application Risk Management
- Infrastructure Risk Management
- Information Security Risk Management
- Risk Registry Remediation

Technology Innovation and Capabilities

The goal of the Technology Innovation and Capabilities aspect of the program is to implement initiatives which add new capabilities or expand existing capabilities to realize improvements, efficiencies or financial benefits. To be effective, technology management requires a continual review of innovative emerging technologies and how they may apply to our information technology environment. Advances in technology occur rapidly and require ongoing assessment for applicability to our environment. As such initiatives will take a promising technology and pilot it for applicability before embarking on a larger deployment. Additionally, this area captures initiatives that expand on existing capabilities. Specific projects will be identified on an annual basis.

4 PROGRAM SCOPE DEFINITIONS

- **Application Risk Management:** Investments in the remediation of prioritized recommendations identified by Application Portfolio Management.

- **Infrastructure Risk Management:** Investments in infrastructure upgrades to remain on current and supported technologies. Infrastructure Health Improvements invests in technology services and solutions which improves our operation of IT Infrastructure assets within the data centre.

- **Information Security Risk Management:** Implement solutions to manage risks information security risks identified and prioritized through the use of security risk assessment tools and processes.

- **Risk Registry Remediation:** Implement solutions to lessen high priority Enterprise risks. Past investments have focused on Business Continuity and Disaster Recovery, reducing risk through better event preparedness and by investing in response capabilities.

5 PROGRAM STRATEGY

MPI will leverage internal expertise and external advisory services to identify specific opportunities for improved Technology Risk Management or Technology Innovation and Capabilities. In accordance with the corporate Value Management process, these opportunities will be documented and refined until the final list is submitted to Executive Committee and the MPI Board of Directors for approval.

Upon approval, an annual program charter will be created for both Technology Risk Management or Technology Innovation and Capabilities for each fiscal year.

Throughout the delivery of the product(s) or service(s) described in this Charter, the Program Director and Project Managers will leverage the MPI Enterprise Project

Management Methodology and EPMO Toolkit to provide the delivery framework for managing the project.

Each project within the program will follow the process outlined above to produce a project implementation plan specific to the delivery of that project's objectives, scope and defined deliverables. All projects will be governed following the program organizational chart shown in section 8.

6 PROGRAM ASSUMPTIONS

N/A

7 PROGRAM BUDGET

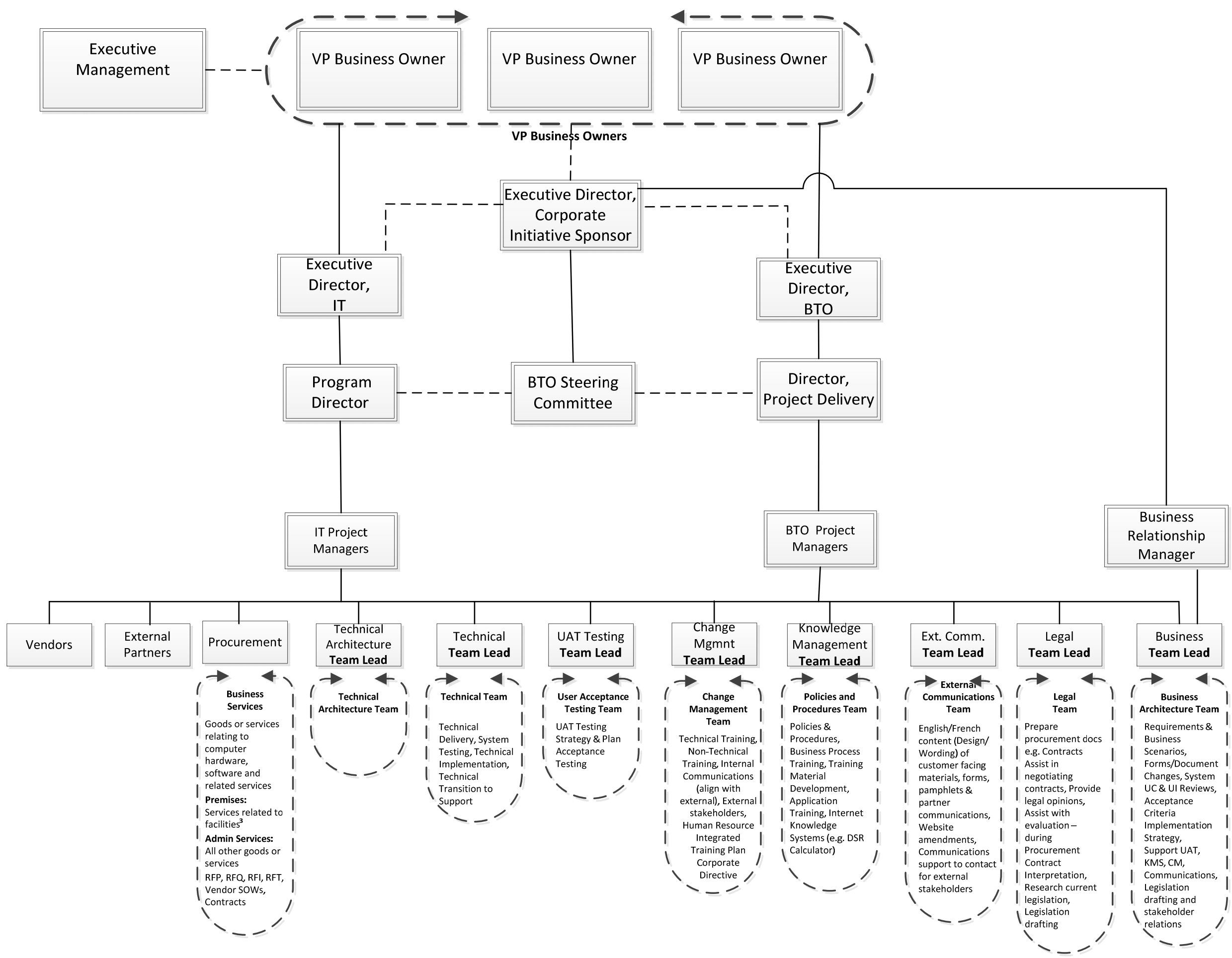
Funding Area	2016/17	2017/18	2018/19	2019/20
Technology Modernization	$6.0M	$9.0M	$11.0M	$14.0M

Management intends to seek funding, for the appropriate amount, on an annual basis to ensure IT risks are sufficiently addressed in a timely manner and capabilities are maintained or developed as required to support the Corporate Strategic Plan.

8 PROGRAM ORGANIZATION

The delivery of these projects will follow the BTO Phase delivery approach. BTO EPMS will manage and review the monthly project budgets, expenditures, resource costs and other aspects of project financial management.

The EPMO will assist with resource requests. The Director, Project Delivery will review test cycles and delivery dates to ensure they coincide with the master schedules and the Corporate Enterprise architect will contribute to, and review all architectural artifacts.



8.1 Roles and Responsibilities

Executive Director, Corporate Initiative Sponsor
The Executive Sponsor is the principal interface between the program and the business community. The Sponsor has the authority to accept all deliverables and resolve all project issues.

Responsibilities include:

- Provide strategic direction and guidance for the program and ensure alignment with overall corporate objectives
- Overall acceptor of Business Architecture deliverables, and other deliverables as identified in each Project Plan.

VP Business Owner

- Support business sponsorship of Projects
- Provide oversight on Program direction, risks, issues
- Facilitate cross organization dialog

Executive Director, Business Transformation and Executive Director, IT
The Executive Director, Business Transformation and Executive Director, IT are accountable for the planning and successful implementation.
Responsibilities include:

- Promote the benefits of the program so as the gain buy-in from stakeholders
- Secure approvals of key Project Deliverables as outlined in each Project Plan.
- Provide direction and support to the delivery of the program, this includes actions such as:
    - Expedite decisions for the program
    - Help to remove roadblocks that could potentially negatively impact the program

Program Director
The program manager provides the centralized coordinated management of the program to achieve the program's strategic objectives and benefits.
Responsibilities include:

- As a key focus, ensures that the program achieves the outcomes for which the program is being initiated. This may involve the creation of new projects, recommendation of scope changes to projects, cancellation of projects, and review/consulting on dotted line projects.
- Monitoring business outcomes being met
- Project issues being resolved in a timely manner and delivery timelines for all the projects being met
- Provide project managers with support and guidance on individual projects

- Ensure alignment of the projects with the program and organizational performance objectives
- Ensure that the overall program structure and program management processes enable the project teams to successfully complete their work
- Ensure that the project deliverables are addressing the program benefits and objectives
- Ensure projects are organized and executed in a consistent manner and/or fulfilled within the established standards
- Leverage resources among the program's projects
- Evaluate total ownership costs, requirements and configuration management across projects

Director, Project Delivery
The Director, Project Delivery is accountable for collaborating with the program director to ensure the successful implementation of the program.

Responsibilities include:

- Provide overall guidance to the program and ensure alignment with overall corporate in-flight initiatives
- Work with the program teams to schedule and coordinate release dates ensuring they align with other in-flight initiatives

PMO Support
PMO Support provides support to the Project Director and Project Managers by ensuring standard processes exist and are adhered to and assisting with tracking and monitoring status.
Responsibilities include:

- Ensure compliance to established guidelines and standards for schedule management
- Ensure governance and controls are being adhered to
- Provide resource support to the Program Director to ensure projects are being delivered on-time and on-budget
- Work with Program Director and Project Managers to manage and track project / program budgets
- Assist project managers with resource allocations and estimates

Project Managers
The Project Managers are responsible for the timely completion of all deliverables within their team, and planning and management of the work to complete delivery.
Responsibilities include:

- Participate in planning and re-planning
- As per MPI EPMO standards, apply disciplined project management tools, techniques and methods
- Create and maintain project schedule
- Support issue and risk management processes

- Identify and resolve Project issues/risks and escalate to the Team Lead or Program Manager, if required
- Ensure quality of deliverables
- Defining and managing and controlling scope
- Manage and coordinate resources within the team
- Identify additional Resource needs to Team Lead/Program Manager
- Monitor and report Team progress

9 AUTHORIZATION

VP Business Owner

PUB (MPI) 2-17

Volume:	**PUB/MPI 1-36**	**Page No.:**	
Topic:	**Expenses**		
Sub Topic:			
Issue:	**Staffing Levels**		

Preamble: Actual staffing for 2015/16 was 1,882.4 FTE. The Corporation is budgeting for 2016/17 1,956.15 FTE, an increase from actual of 73.75 positions.

Question:

a) Please provide a comparison of total Corporate Staffing levels Actual by category from 2015/16 actual to 2016/17 budget.

b) Given the average salary for each of the categories listed and the forecasted change in FTEs in (a), please demonstrate the budgeted change in total net compensation forecast for 2016/17 and 2017/18.

Rationale for Question:

To understand the changes in staffing levels and impact on cost containment.

RESPONSE:

a) Please refer to Attachment.

b) The net change in 2016/17 and 2017/18 forecasted total corporate compensation has been provided for in *PUB (MPI) 1-38 (b)* of this year's application.

CORPORATE STAFFING LEVELS

AVERAGE ACTUAL STAFF IN 2015/2016

2015/16 Total Staff Actuals (FTE)

CATEGORY	Customer Service	Business Development & Communications	Human Resources	Finance	Management, Internal Audit & Regulatory	General Counsel	IT & BT	Total
Management	67.6	20.1	16.6	23.2	10.2	2.0	25.5	165.2
Supervisory	125.7	6.7	-	1.4	-	1.7	5.6	141.1
Technical/Professional	534.4	102.2	66.9	90.1	10.6	20.7	196.0	1,020.9
Clerical	459.0	38.5	7.2	32.5	1.0	5.5	11.5	555.2
Total	**1,186.7**	**167.6**	**90.6**	**147.2**	**21.8**	**29.9**	**238.6**	**1,882.4**

STAFFING BUDGET IN 2015/2016

2016/17 Total Budget (FTE)

CATEGORY	Customer Service	Business Development & Communications	Human Resources	Finance	Management, Internal Audit & Regulatory	General Counsel	IT & BT	Total
Management	69.0	23.0	16.0	27.0	10.0	2.0	27.0	174.0
Supervisory	122.0	6.0	-	2.0	-	1.0	3.0	134.0
Technical/Professional	534.2	109.0	80.4	104.6	10.0	20.8	225.4	1,084.4
Clerical	476.5	35.0	4.0	34.3	1.0	4.0	9.0	563.8
Total	**1,201.7**	**173.0**	**100.4**	**167.9**	**21.0**	**27.8**	**264.4**	**1,956.2**

* includes FTE related to the vacancy provision

COMPARISON ACTUAL VS. BUDGET 2015/2016

Variance 2015-16 actual vs 2016-17 Budget (FTE)

CATEGORY	Customer Service	Business Development & Communications	Human Resources	Finance	Management, Internal Audit & Regulatory	General Counsel	IT & BT	Total
Management	1.4	2.9	(0.6)	3.8	(0.2)	-	1.5	8.80
Supervisory	(3.7)	(0.7)	-	0.6	-	(0.7)	(2.6)	(7.10)
Technical/Professional	(0.2)	6.8	13.5	14.5	(0.6)	0.1	29.4	63.45
Clerical	17.5	(3.5)	(3.2)	1.8	-	(1.5)	(2.5)	8.60
Total	**15.0**	**5.5**	**9.7**	**20.7**	**(0.8)**	**(2.1)**	**25.8**	**73.8**

Explanation of Variance:

The budgeted FTE count includes approximately 82 FTE positions related to the vacancy provision

PUB (MPI) 2-18

Volume:	PUB/MPI 1-45	Page No.:	
Topic:	Expenses		
Sub Topic:			
Issue:	Corporate Compensation Analysis		

Preamble: PUB/MPI 1-45 (b) requested initiative salaries and the Corporation's response was for total corporate staffing.

Question:
Please provide the respective FTE count for initiative salaries, including detail of initiative staff count and average salary by level, to support the $3 million in annual salary cost related to initiative salaries.

Rationale for Question:
To understand forecast changes in compensation expense.

RESPONSE:
Please see below for Initiative Staffing Full-time Equivalent (FTE) and associated salaries by project. To support the $3 million in annual salary cost, 2016/17 information has been provided.

Table 1 Initiative Staffing

Fiscal Year	Actual	Budget	Over (under) Variance
2010/11	48.6	81.6	(33.0)
2011/12	15.4	26.2	(10.8)
2012/13	17.1	35.1	(18.0)
2013/14	15.0	16.5	(1.5)
2014/15	10.6	16.5	(5.9)
2015/16	15.7	12.5	3.2
2016/17	-	28.7	0.0
2017/18	-	30.0	0.0
2018/19	-	28.0	0.0
2019/20	-	28.0	0.0
2020/21	-	28.0	0.0

Initiative (2016-17)	*(C$000s)*
Physical Damage Re-engineering	494
Infor-Lawson Upgrade Projects	896
Info Security Strategy and Roadmap	405
Non Basic Projects	828
Financial Re-engineering Initiative	430
TOTAL	**3,053**

PUB (MPI) 2-19

Volume:	PUB/MPI I-49	Page No.:	
Topic:			
Sub Topic:			
Issue:	Benchmarking		

Question:

a) Please advise of whether there is an updated report similar to that dated May 24, 2013. If so, please file it. If not, please advise of why not.

b) Please advise why the Corporation was the author of the benchmarking as opposed to the provision of a document authored by the Ward Group.

Rationale for Question:

To assess the Corporation's benchmarking results.

RESPONSE:

a) There are no updated reports similar to that dated May 24, 2013. Many of the metrics provided in the May 24, 2013 report are updated and reported on in *Volume I BMK*, and *Volume III AI.12 Benchmarking Appendices*.

Volume III AI.12 Benchmarking Appendices Appendix 1 Section 1.1 and Section 1.2 consist of indicators identified by the Ward Group as being the most meaningful indicators of operational efficiency.

b) Manitoba Public Insurance’s (MPI) benchmarking framework includes four major areas of corporate performance (operational efficiency, Information Technology (IT) service delivery capability, serving Manitobans, and community impact).

The Corporation engages the Ward Group to provide independent benchmarking services and the results are a key input for the Corporation in assessing its operational efficiency. However, the other three major areas of corporate performance are measured using other means. Therefore, the Ward Group would not be in position to author the benchmarking report.

PUB (MPI) 2-20

Volume:	**PUB (MPI) 1-51(b)**	**Page No.:**	
Topic:	**Claims Incurred**		
Sub Topic:			
Issue:	**Deferred Policy Acquisition Cost (DPAC)**		

Question:

Please provide the pages referenced in this response from the 2016 GRA, and expand on their relevance to the Corporation's consideration of mitigating the interest rate sensitivity of the premium liabilities.

Rationale for Question:

To clarify the Corporation's response.

RESPONSE:

Please see *PUB (MPI) 1-21 (a)* for the Corporation's rationale for not including premium liabilities in the AON ALM study. The Corporation acknowledges that the referenced pages from the 2016 GRA are not relevant to the question posed in *PUB (MPI) 1-51 (b)*.

PUB (MPI) 2-21

Volume:	**II EXP., Appx. 3**	**Page No.:**	**8**
Topic:	**Expenses**		
Sub Topic:			
Issue:	**Merchant Fees**		

Preamble: Based on the Pro Forma variance analysis for allocated corporate expenses, merchant fees have increased materially.

Question:

a) Please explain the forecasted 8.1% compounded annual growth rate for merchant fees from 2016/17 to 2018/19.

b) Please quantify the impact of volume of customers upon the change in forecasted merchant fees.

c) Please describe the basic terms of the merchant fee arrangements and indicate the rate charged to the Corporation from 2012/13 through 2019/20.

Rationale for Question:

To understand the changes in merchant fees.

RESPONSE:

a) The 8.1% average growth rate for merchant fees from 2016/17 through to 2018/19 is attributable to expected higher volumes (given historical trends) related to credit card processing and the anticipated forecasted premium growth. The Corporation increased the budget based on historical experience to better reflect expected usage of credit card payment methods and merchant fees experience to date and the subsequent forecasts related to merchant fees were also increased to account for these expected increases.

b) The change in forecasted merchant fees is impacted by the increase in premium revenue which is not necessarily due to an increase in customer volume.

c) The pricing for this service is mainly driven by the merchant discount rate which consists of the interchange rate set by the Card Association (VISA and MasterCard are members) plus a spread based on merchant sales and transaction volumes. The merchant fee arrangements include established transaction rates dependant on the various types of cards including Consumer, Corporate and Premium at various rates depending on the type of transaction including Standard, Electronic, or Recurring. On top of the card transaction fee, there is a card brand fee and a service bureau processing fee.

The rates for VISA and MasterCard from 2012 to 2015 ranged from 1.58% for a recurring electronic consumer card transaction to 2.76% for a standard premium card transaction.

In 2016, based on updates to the Code of Conduct governing the Credit and Debit Card Industry in Canada, our rate structure changed to facilitate the pass-through of card brand interchange rate reductions to merchants. Under this new rate model, our VISA and MasterCard rates range from 1.37% for a recurring electronic consumer card transaction to 2.65% for a standard premium card transaction.

PUB (MPI) 2-22

Volume:	**II EXP, Appx. 8 Cost Allocation Methodology**	**Page No.:**	**33-37**
Topic:	**Expenses**		
Sub Topic:			
Issue:	**Cost Allocation**		

Preamble: There appear to be some changes in the allocators used this year versus last year.

Question:

a) Please explain whether the FTE count used in establishing allocators is impacted by the planned move for internalizing IT consulting positions during the forecast period.

b) Please confirm that "claims under management" used this year is the same as "claims incurred" as defined last year. If not, please explain the change.

c) Please explain the change in the relative percentages between Insurance and Non-Insurance for allocation of vehicle registration in this year's application (14.6% Insurance and 85.4% Non-Insurance) versus last year (18.4% Insurance and 81.6% Non-Insurance).

Rationale for Question:

To understand the changes made to the cost allocation methodology.

RESPONSE:

a) The Full-Time Equivalent (FTE) percentage allocator is used to allocate shared expenses between operating and claims expense categories. As the internalizing of Information Technology (IT) Consultants would be classified in the shared allocation category, there would be no impacts in the establishment of the FTE allocator. Please refer to *Volume II EXP.4.1.4 FTE Proportions Between Claims and Operating Allocator page 49* for more details.

b) Confirmed.

c) The relative percentages between Insurance and Non-Insurance for allocation of vehicle registration in *Volume II EXP Appendices Appendix 8* of last year's application unfortunately did not get updated. The allocation percentages shown in last year's GRA were inadvertently carried forward from the 2015 GRA without being updated. The percentages shown in last year's rate application should have read 15.2% Insurance and 84.8% Non Insurance. The slight differences in allocation percentages from the corrected 2016 GRA to this year's application is mainly attributed to a larger proportion of compensation allocated to the non-insurance category of business. To help clarify, the following table has been provided:

Year	Category	Cost Category	Accounting Unit	PUB Approved Method
2015 GRA	Vehicle registration	F	102	18.4% Insurance 81.6% Non-Insurance then Insurance 100% Basic operating
2016 GRA	Vehicle registration	F	102	15.2% Insurance 84.8% Non-Insurance then Insurance 100% Basic operating
2017 GRA	Vehicle registration	F	102	14.6% Insurance 85.4% Non-Insurance then Insurance 100% Basic operating

PUB (MPI) 2-23

Volume:	II, EXP	Page No.:	7
Topic:	Graph of the total Basic expenses comparison		
Sub Topic:			
Issue:			

Preamble: It appears that the graph reflects only Basic allocated corporate expenses and does not include commissions and premium taxes.

Question:

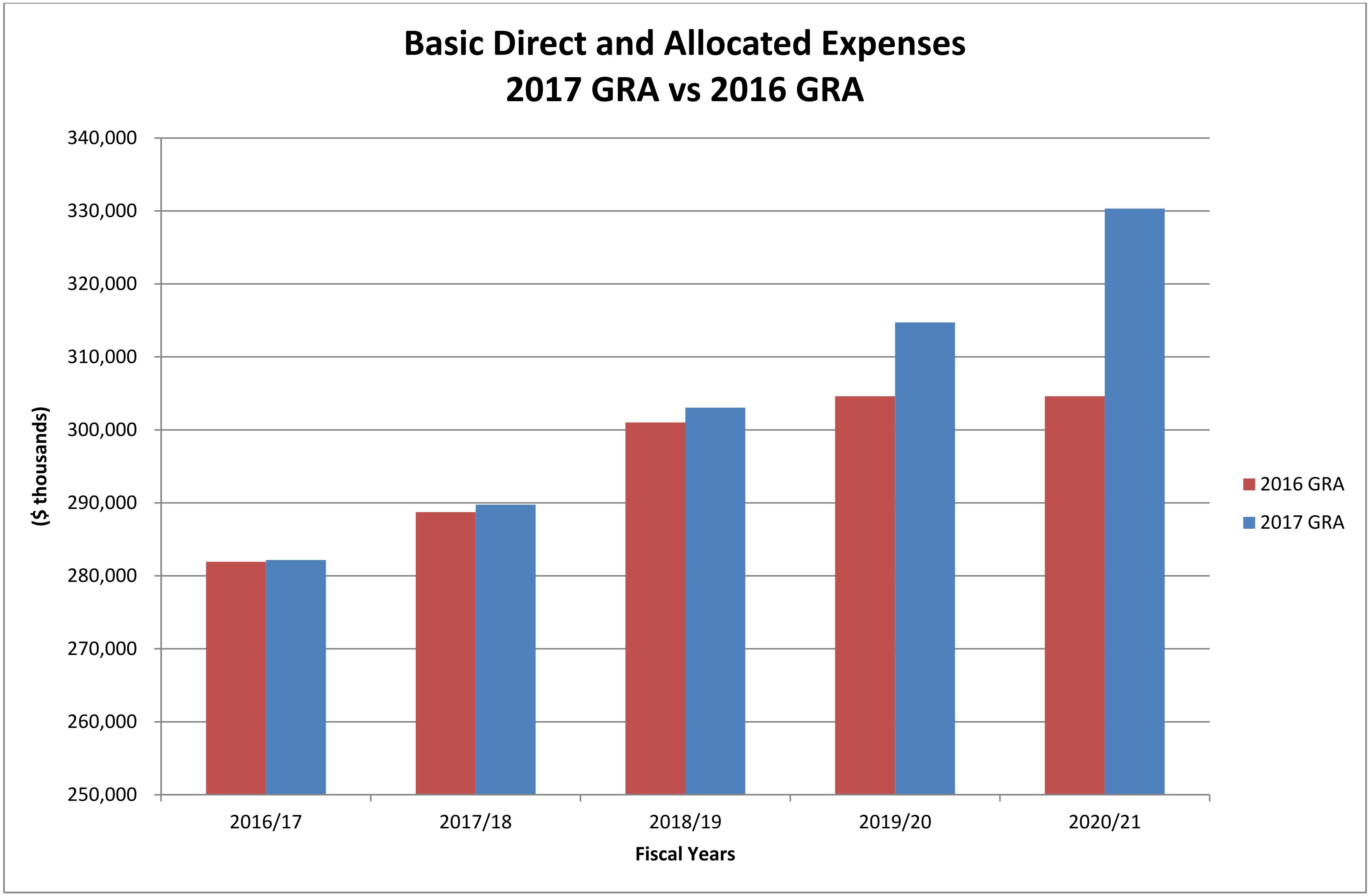
Please refile the graph to include Basic direct expenses (commissions and premium taxes).

Rationale for Question:

To understand the change in all Basic expenses from the 2016 GRA to the 2017 GRA.

RESPONSE:

Please refer to the graph below.


Basic Direct and Allocated Expenses
2017 GRA vs 2016 GRA
340,000
330,000
320,000
310,000
300,000
290,000
280,000
270,000
260,000
250,000
($ thousands)
2016/17
2017/18
2018/19
2019/20
2020/21
Fiscal Years
2016 GRA
2017 GRA

PUB (MPI) 2-24

Volume:	**II EXP**	**Page No.:**	**Appx. 12**
Topic:	**Risk Classification**		
Sub Topic:			
Issue:	**Predictive Analytics**		

Preamble: The Corporation shows actual Basic deferred development costs of $1,260,000 and $488,000 with respect to Predictive Analytics in fiscal years 2014/15 and 2015/16, respectively.

Question:
Please provide details of what this work entailed, how it might affect or has affected Basic rates, and any current expectations for future project work in this area.

Rationale for Question:
To understand how Basic rates have been or may be affected by the use of predictive analytics.

RESPONSE:
Work Entailed
The scope of work for Predictive Analytics included the development and deployment of predictive models. Predictive Analytics uses advanced analytic techniques such as data mining and statistics to extract information from current and historical data to create predictive models that identify claims that warrant investigation from a claims fraud perspective.

Affect on Basic Rates
The Predictive Analytics project will incur approximately $350,000 of Basic expenses per annum from 2016/17 through to 2020/21. This is related to deferred development amortization.

Future Project Work

The Predictive Analytics solution has been implemented and there is no expectations of future project work in this area.

PUB (MPI) 2-25

Volume:	II, INV.1.2	Page No.:	11
Topic:	Interest Rate Risk Forecasting		
Sub Topic:			
Issue:	IRFRF		

Preamble: Historically, the Corporation has recognized consistently that it bears the onus of proof in the GRA process. It is assumed that the Corporation continues to so recognize.

Question:

a) Please advise of whether the Corporation is aware of the use of an IRFRF in any other jurisdiction, and if so, please describe with reference to the jurisdiction.

b) Please provide the Corporation's requested rate change incorporating the requested IRFRF, or in the alternative, how the Corporation expects the amount of the IRFRF to be resolved.

Rationale for Question:

To understand the rate impact of the requested IRFRF.

RESPONSE:

In response to the preamble, the Corporation does bear the burden of proof. It considers that the Application and information provided in response to information requests does make the case for the relief sought.

a) The Corporation is currently not aware of any form of Interest Rate Forecast Risk Factor (IRFRF) employed in other jurisdictions. The requested relief is in response to the unique circumstances facing the Corporation. As summarized in the response to (b) below, those unique circumstances relate to the prescriptive nature of the Public Utilities Board (PUB) order from the last GRA. The Order required the Corporation to apply an interest rate forecast that the Corporation has concluded departs significantly from a "best estimate". The Corporation's Basic rates are properly established using "best estimates", which makes the adoption of the Standard Interest Rate Forecast (SIRF) an anomalous departure from the accepted practice of breakeven ratemaking.

The proposal to incorporate an IRFRF is intended to respect and comply with the PUB's prior order, while allowing recognition of the risk associated with adopting that approach in the current circumstances. The Corporation views that this proposal is in the interest of Manitobans and is necessary to prevent potential rate shock. The amount of the IRFRF would ultimately reflect the PUB's assessment, informed by input from the Corporation and other parties, of the extent of the risk and risk tolerance in the context of financial integrity and smooth and stable Basic insurance rates.

Please see also *CAC (MPI) 1-94*.

b) The Corporation recommends deriving the proposed IRFRF using a 50/50 weighting of the SIRF and naïve forecasts. This response explains the context for Corporation's current recommendation regarding the magnitude of the IRFRF, the rationale for adopting the equal weighting approach, and its proposed implementation in rates.

Context

For context, the Corporation's 2017 General Rate Application (GRA), requested among other relief, the following:

- A 2.0% overall Basic insurance rate change effective March 1,2017

  and

- An Interest Rate Forecast Risk Factor (IRFRF), effective March 1, 2017, the form and magnitude of which will be developed through a collaborative process with the Public Utilities Board (PUB) and interveners.

The Corporation's 2017 GRA was prepared based on the Standard Interest Rate Forecast (SIRF) in compliance with Board Order 128/15 which stated:

> 10.14 MPI file next year's GRA on the basis of the interest rate forecasting methodology that it uses currently, as well as on the basis of an Olympic style average (i.e. excluding each of the highest and lowest values of the non-long term standard interest rate forecasts utilized), and utilizing at least one additional longer term forecast.

Applying the SIRF in compliance with the PUB Order would yield the 2% rate change (with no IRFRF), but would potentially have significant implications for the Corporation and future Basic rates. In the 2017 GRA the Corporation detailed the impact of the SIRF on the Basic Net Income, and requested the IRFRF to be implemented in addition to the requested 2% overall rate increase in an effort to mitigate the risk posed by the SIRF. The Corporation views that Basic's financial health is significantly exposed to this risk, and that the solution detailed below is consistent with the high standard of financial responsibility expected by management and the public at large.

The Corporation proposed in the Application that the form and magnitude of the IRFRF would be developed collaboratively with the PUB and interveners through the rate application process.

At the Pre-hearing Conference, the Corporation proposed an approach and timetable for the collaborative process. It involved holding at Technical Conference to explore the possibility of reaching consensus on the form and magnitude of the IRFRF. In response to feedback from the PUB panel, the Corporation advanced the schedule for the Technical Conference to August 16, 2016.

At the Technical Conference, the Corporation re-iterated the case for an IRFRF as detailed in the 2017 GRA. As outlined in the presentation by CFO, Heather Reichert (*Exhibit MPI-6*), the IRFRF is required to address the negative impacts of poorly performing interest rate forecasts on net income. Ms. Reichert explained how "Interest Rate Risk" is not the same as "Interest Rate Forecasting Risk"; the latter of which is caused by the SIRF as a result of third party forecasts that have consistently overstated the interest rate forecast relative to actual results. As the Corporation had indicated in the 2017 GRA, a 7% overall rate increase (or 2% plus a 5% Interest Rate Forecast Risk Factor) would be required to break-even on Basic if the SIRF did not materialize and interest rates instead were to remain flat from where they are today (the naïve forecast).

Ms. Reichert also explained that the following would not be appropriate solutions to Interest Rate Forecasting Risk:

- Change Asset Liability Management approach
- Rely on Rate Stabilization Reserve
- Use Interest Rate Margin for Adverse Deviation

The Corporation also presented research prepared by Dr. Sean Cleary, CFA, which assessed the past performance of the SIRF, and cautioned against relying too heavily on the SIRF going forward. The key conclusions of Dr. Cleary's report are that over the period of analysis a simple naïve forecast has outperformed the SIRF, and that due to a number of global economic factors, the SIRF is unlikely to materialize in the near future. (Please see *Exhibit MPI-7* and *MPI-8*)

The Chief Actuary, Luke Johnston presented possible options for the IRFRF (please see *Exhibit MPI-9*), of which the recommended approach was a risk factor rate increase. The magnitude of the IRFRF could be based on risk tolerance, an adjustment to the SIRF, or based on historical context. Mr. Johnston presented multiple scenarios for the IRFRF magnitude and the resulting IRFRF rate increase of each of those scenarios. Mr. Johnston advised that the IRFRF should be put in place to protect against the risk that rates are systematically deficient, as has occurred in past rating years based on the SIRF.

Further, Mr. Johnston explained that the Corporation does not believe that the SIRF is a "best estimate", a point to which Dr. Cleary agreed during the day's discussion. The Corporation, and Dr. Cleary, further made the point that determining a "best estimate", somewhere in the range between a naïve forecast and the SIRF, would require judgment.

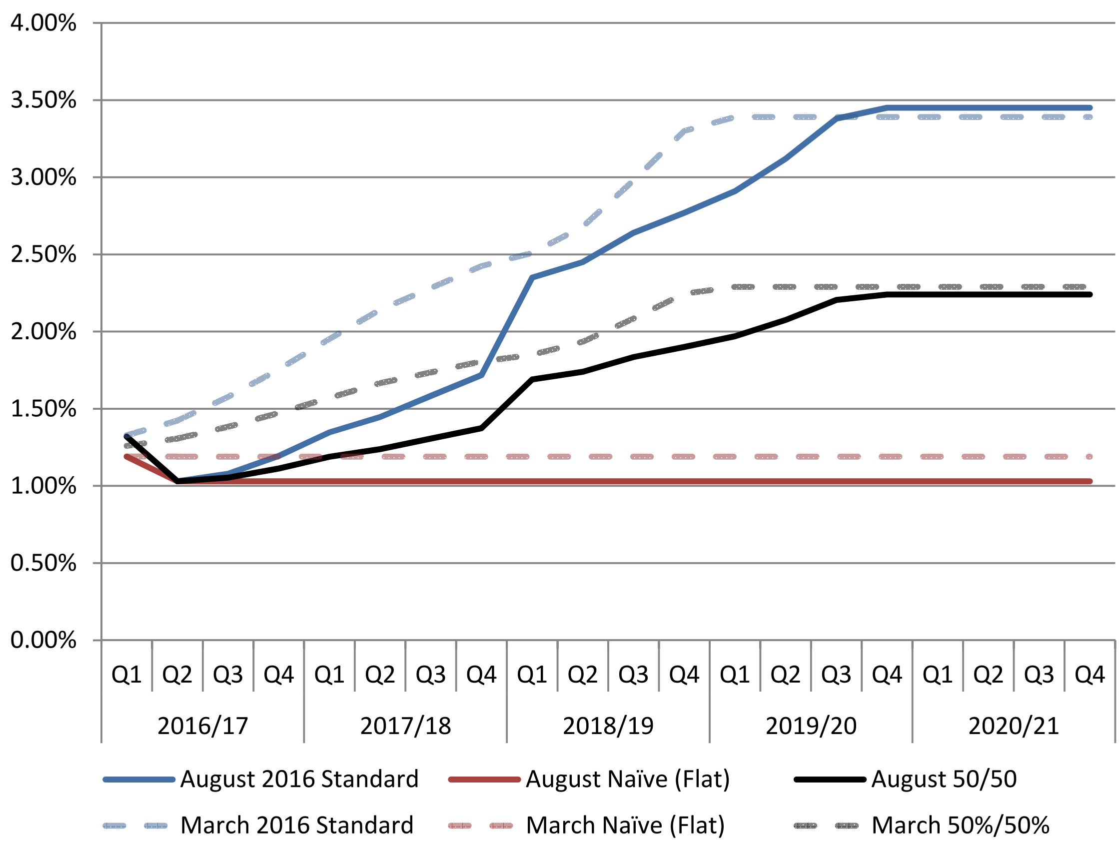
Dr. Cleary was asked by a conference participant for his view on the appropriate level of the best estimate interest rate forecast. His view is that a combination of the SIRF and naïve forecast would be a reasonable estimate, over the longer run. This is because incorporating the starting point into the forecast will reduce the errors. Further, Dr. Cleary indicated that if the SIRF forecasts were reasonable, then a weighting of "50/50" would form a reasonable compromise.

The Corporation has considered the discussions that took place at the technical conference, Dr. Cleary's assessment, and the Corporation's own assessment of what would constitute a "best estimate" in the circumstances. The Corporation considers that it would be appropriate to proceed on the basis of a 50/50 interest rate forecast, taken as the simple average on a quarterly basis, of the SIRF and the naïve forecast, using the most current data available (currently August 2016 figures, but a new forecast will be available by the time the hearing commences). The implication of the simple averaging is that equal weighting is being given to the SIRF and the naïve forecast.

Application of a 50/50 Weighting Approach

The Corporation views the 50/50 interest rate forecast as a "best estimate". To illustrate the composition of the 50/50 forecast, the chart below presents the most current SIRF, naïve, and 50/50 forecasts as at August 2016, and the equivalent forecasts from March 2016.

Figure 1 "50/50" Interest Rate Forecast



Using the most current 50/50 interest rate forecast, the Corporation has calculated a risk factor rate increase of 2.3% over and above the base 2.0% rate increase reflecting the use of the SIRF alone.

The following table presents the Net Income and projected Rate Stabilization Reserve (RSR) balance under the 50/50 forecast (August 2016) as compared to the SIRF prior to any remedy for interest rate risk being applied.

Table 1 Standard and 50/50 Interest Rate Forecast: Net income and RSR

Scenario ($millions)		2016/17	2017/18	2018/19	Rating Years
GRA Standard Forecast	Net Income	($18.1)	($8.4)	$7.3	($0.6)
2% Rate Increase	RSR	$217.1	$220.5	$236.4	
August 50/50 Scenario	Net Income	($34.7)	($25.2)	$24.7	$0.3
4.3% Rate Increase	RSR	$196.3	$194.2	$213.1	

A complete set of proformas for the 50/50 forecast (August 2016) reflecting a 2.3% risk factor rate increase and the base 2% rate increase have been included in Attachment A. In light of the large range of potential interest rate outcomes referenced above, and the significant risk posed to the Corporation and policyholders by interest rates forecasts, the Corporation submits that an IRFRF calculated based on a 50/50 weighting is reasonable and in the long term best interests of the Corporation and policyholders. The Corporation believes it is necessary to correct the systemic undercollection of premium in past years that has resulted from third party interest rate forecasts that have failed to materialize. The Corporation is both mindful and concerned about rate increase impacts on customers and proposes a specific and targeted measure for relief below that we believe is in the best interest of ratepayers by preventing rate shock. Additionally, the Corporation has successfully reduced operating costs in recent years, eliminating costs equivalent to approximately a 2% rate increase.

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Implementation

The two rate increase components, the base 2% rate increase, and the 2.3% risk factor rate increase should be implemented as a combined 4.3% rate increase. In order to ensure that the combined rate increase is implemented in an appropriate and actuarially sound manner, the Corporation has re-run the rate model to properly reflect the impact of the interest rate forecast across the major classes.

The application of the 50/50 methodology generally produces single year major class rate increases of a reasonable magnitude. The one exception is the rates for the motorcycle major class, which are very sensitive to changes in interest rates because of the large percentage of long tail injury claims in this class. Using the 50/50 interest rate methodology would result in the rate indication changing from -2.1% (GRA as filed) to +8.8%. To mitigate this impact, the Corporation proposes a one-time only adjustment to the motorcycle ratemaking methodology. As shown in *CMMG (MPI) 2-2*, motorcycles use 10 years of historical experience to determine their indicated rates. However, the 2006 year (i.e. the 10^{th} year of the historical period) has an abnormally high level of PIPP losses. The Corporation proposes that for the 2017 GRA only motorcycle rates be calculated based on the 9 year historical average for Accident Benefits – Other and Income Replacement Indemnity. This change in methodology would cause the initial +8.8% rate indication for motorcycles to fall to +2.4%. The Corporation notes that in any event the 2006 experience would have been omitted from the 10 year average calculation in the 2018 GRA.

The practical effect of this one time only change in methodology for motorcycles is to significantly reduce the impact of the "best estimate" interest rate forecast on the motorcycle major class, while preserving the overall effect on Basic Net Income. The Corporation views this one-time adjustment as being consistent with sound ratemaking principles, and necessary to achieve the desirable outcome of limiting rate shock to the motorcycle major class. The Corporation notes this is consistent with the approach to ratemaking articulated in *PUB (MPI) 1-47(b)*. Notwithstanding this one time only change, the Corporation continues to support and rely on its general methodology as outlined in *Volume II RM page 31*.

Table 2 presents the impact to major classes of adopting the 50/50 best estimate interest rate forecast, before and after the adjustment to the Motorcycle major class.

Table 2 50/50 Interest Rate Forecast: Impact to major Classes

Major Class	2% Overall Rate Increase	4.3% Combined Rate Increase	4.3% Combined Rate Increase (with Motorcycle Adjustment)
Private Passenger	1.7%	3.9%	4.0%
Commercial	5.9%	10.2%	10.3%
Public	3.7%	6.4%	6.5%
Motorcycles	-2.1%	8.8%	2.4%
Trailers	13.4%	11.4%	11.4%
ORVs	-31.4%	-31.3%	-31.3%
Overall	2.0%	4.3%	4.3%

Impact on RSR Targets

The 50/50 scenario for deriving the proposed IRFRF has implications for the minimum and maximum RSR levels, which are summarized below.

The Corporation is re-running the DCAT model to establish the appropriate minimum RSR level based on a 50/50 scenario. The revised lower RSR target based on the DCAT is expected to decrease materially as a result of both the higher assumed rate increase (4.3% vs. 2.0%) and the less aggressive base interest rate forecast. The DCAT will respond to changes in the Corporation's risk profile, and both the rate increase and the revised interest rate forecast reduce the risk of adverse financial outcomes for Basic over the forecast period. As a result of the expected magnitude of the change, Actuarial standards require that a full revised DCAT report be produced, so the supporting calculations will be provided when the DCAT is complete. The Corporation will file a revised DCAT as soon as it is completed, which is estimated to take approximately two weeks.

The upper RSR target is based on an MCT ratio of 100%. Although the MCT is less impacted by forecasting risk, the 100% MCT target will also change because the revised interest rate forecast changes the Corporation's *forecasted* financial position at the start of 2017/18 rating year. The revised maximum RSR target has increased from $404 million to $411 million as a result of the best estimate 50/50 interest rate forecast. Changes to base forecast have been reflected in the MCT calculation in *Attachment B*.

As is customary in advance of the oral hearing, the Corporation anticipates providing the PUB with updated rate indication and RSR targets once the most recent data is available to update the 50/50 interest rate forecast.

PF.1 STATEMENT OF OPERATIONS

Manitoba Public Insurance
Multi-year - Statement of Operations

2017 GRA - 4.30% Basic Rate Change with August 50/50 Interest rate forecast

(C$ 000s, rounding may affect totals)

	For the Years Ended February,					
	2016A	2017B	2018F	2019F	2020F	2021F
BASIC						
Motor Vehicles	854,170	893,420	976,257	1,020,825	1,068,003	1,117,494
Drivers	46,618	50,393	52,908	55,180	57,424	59,626
Reinsurance Ceded	(12,423)	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Written	**888,365**	**932,181**	**1,017,289**	**1,063,891**	**1,113,071**	**1,164,517**
Net Premiums Earned						
Motor Vehicles	827,701	875,348	938,038	1,000,262	1,046,236	1,094,659
Drivers	45,787	48,478	51,645	54,039	56,298	58,521
Reinsurance Ceded	(12,423)	(11,632)	(11,876)	(12,114)	(12,356)	(12,603)
Total Net Premiums Earned	**861,065**	**912,194**	**977,807**	**1,042,187**	**1,090,178**	**1,140,577**
Service Fees & Other Revenues	20,351	21,557	23,227	25,122	27,097	29,022
Total Earned Revenues	**881,416**	**933,751**	**1,001,034**	**1,067,309**	**1,117,275**	**1,169,599**
Net Claims Incurred	742,664	767,126	790,682	842,119	876,488	918,505
(a) Claims Incurred - Interest Rate Impact	(75,300)	9,654	(33,622)	(78,787)	(42,361)	(2,335)
Total Claims Incurred	**666,404**	**776,780**	**757,060**	**763,332**	**834,127**	**916,170**
Claims Expense	118,614	125,191	128,708	133,420	141,159	148,283
Road Safety/Loss Prevention	13,027	13,318	13,251	14,145	14,135	14,260
Total Claims Costs	**798,045**	**915,289**	**899,019**	**910,897**	**989,421**	**1,078,713**
Expenses						
Operating	71,641	76,908	78,242	82,683	83,608	88,347
Commissions	33,862	35,616	37,683	40,125	41,908	43,779
Premium Taxes	26,205	27,715	29,690	31,629	33,076	34,595
Regulatory/Appeal	3,675	3,421	3,494	3,567	3,641	3,719
Total Expenses	**135,383**	**143,660**	**149,109**	**158,004**	**162,233**	**170,440**
Underwriting Income (Loss)	**(52,012)**	**(125,198)**	**(47,094)**	**(1,592)**	**(34,379)**	**(79,554)**
Investment Income	48,477	79,410	67,893	86,030	80,108	87,231
(b) Investment Income - Interest Rate Impact	(52,515)	11,391	(31,565)	(60,365)	(37,449)	(0)
Net Investment Income	**(4,038)**	**90,801**	**36,328**	**25,665**	**42,659**	**87,231**
Net Income (Loss) from Operations for Rate Setting	**(71,009)**	**(34,690)**	**(25,217)**	**24,697**	**4,965**	**4,970**
Add: DPAC / Premium Deficiency adjustment	(14,959)	(293)	(14,451)	624	(3,316)	(2,708)
Net Income (Loss)	**(56,050)**	**(34,397)**	**(10,766)**	**24,073**	**8,280**	**7,677**
Total net Impact due to interest rate change (b) - (a)	22,785	1,737	2,057	18,422	4,913	2,335

PF.2 STATEMENT OF FINANCIAL POSITION

Manitoba Public Insurance
Multi-year - Statement of Financial Position

2017 GRA - 4.30% Basic Rate Change with August 50/50 Interest rate forecast

(C$ 000s, rounding may affect totals)

	For the Years Ended February,					
	2016A	2017B	2018F	2019F	2020F	2021F
BASIC						
Assets						
Cash and cash equivalents	29,114	10,749	9,619	10,839	11,097	13,665
Investments	2,083,349	2,216,050	2,259,583	2,288,205	2,347,870	2,462,543
Investment property	35,789	40,424	40,996	41,266	41,813	42,960
Due from other insurance companies	25	-	-	-	-	-
Accounts receivable	375,262	302,393	326,221	339,760	354,071	369,015
Deferred policy acquisition costs	4,782	2,434	19,268	19,927	24,600	28,732
Reinsurers' share of unpaid claims	998	-	-	-	-	-
Property and equipment	88,740	86,248	88,863	90,183	90,345	91,720
Deferred development costs	65,414	70,462	77,341	79,991	81,701	64,385
	2,683,473	**2,728,760**	**2,821,891**	**2,870,171**	**2,951,497**	**3,073,020**
Liabilities						
Due to other insurance companies	152	113	113	113	113	113
Accounts payable and accrued liabilites	38,861	29,447	30,993	31,499	32,418	33,959
Financing lease obligation	3,278	2,968	2,899	2,825	2,752	2,678
Unearned premiums and fees	453,389	475,671	518,329	543,475	570,100	598,083
Provision for employee current benefits	16,871	16,527	16,880	17,244	17,616	17,999
Provision for employee future benefits	281,209	286,836	302,414	319,313	336,739	354,910
Provision for unpaid claims	1,658,713	1,720,912	1,756,088	1,742,599	1,761,852	1,817,919
	2,452,473	**2,532,474**	**2,627,716**	**2,657,068**	**2,721,590**	**2,825,661**
Equity						
Retained earnings	194,496	160,099	149,334	173,407	181,687	189,363
Basic Insurance Retained Earnings	-	-	-	-	-	-
Accumulated Other Comprehensive Income	36,504	36,187	44,841	39,696	48,220	57,996
Total Equity	**231,000**	**196,286**	**194,175**	**213,103**	**229,907**	**247,359**
Total Liabilities & Equity	**2,683,473**	**2,728,760**	**2,821,891**	**2,870,171**	**2,951,497**	**3,073,020**

PF.3 STATEMENT OF CHANGES IN EQUITY

Manitoba Public Insurance
Multi-year - Statement of Changes in Equity

2017 GRA - 4.30% Basic Rate Change with August 50/50 Interest rate forecast

(C$ 000s, rounding may affect totals)	For the Years Ended February,					
	2016A	2017B	2018F	2019F	2020F	2021F
BASIC						
Retained Earnings						
Beginning Balance	177,817	194,496	160,100	149,334	173,407	181,687
Net Income (Loss) from annual operations	(56,050)	(34,397)	(10,766)	24,073	8,280	7,677
Premium Rebate	0	0	0	0	0	0
Transfer (to) / from Non-Basic Retained Earnings	72,729	0	0	0	0	0
Total Retained Earnings	**194,496**	**160,099**	**149,334**	**173,407**	**181,687**	**189,363**
Retained Earnings						
Equity Reserve	194,496	160,099	149,334	173,407	181,687	189,363
Excess Retained Earnings	0	0	0	0	0	0
Total Retained Earnings	194,496	160,099	149,334	173,407	181,687	189,363
Total Accumulated Other Comprehensive Income						
Beginning Balance	35,262	36,504	36,187	44,841	39,696	48,220
Other Comprehensive Income for the Year	1,242	(317)	8,654	(5,145)	8,524	9,776
Total Accumulated Other Comprehensive Income	36,504	36,187	44,841	39,696	48,220	57,996
Total Equity Balance	**231,000**	**196,286**	**194,175**	**213,103**	**229,907**	**247,359**
RESERVE TARGETS						
DCAT Total Equity Target	213,000	231,000	181,000*	181,000*	181,000*	181,000*
MCT Total Equity Target	325,000	366,000	411,000	411,000	411,000	411,000

* Based on Initial DCAT Report, to be updated with re-filed DCAT report

Forecasted MCT Results

As a result of a revised Interest rate forecast, the Corporation has revised its *forecasted* 100% MCT ratio as of the *beginning* of the 2017/18 fiscal year (i.e. March 1, 2017) which is to be utilized as the Corporation's upper RSR target. The table below shows the restated revised base scenario such that the beginning 2017/18 Total Equity is adjusted to achieve the 100% MCT target. The indicated 2017/18 100% MCT capital target based on these results is $411 million. The full supporting calculations for this scenario are provided below.

Modeled 100% MCT Requirement for March 1, 2017 (in millions)

	March 1, 2017
Minimum Capital Required	$340
Add: Assets requiring 100% Capital	$71
100% MCT Target	**$411**
Base Scenario Total Equity Forecast	$196
Additional Total Equity required for 100% MCT Target	**$215**

The table below provides the projected 100% MCT ratios for the fiscal year's beginning in 2018/19 through 2020/21. The supporting calculations for these figures are provided below.

Modeled 100% MCT Requirement for the Base Forecast (in millions)

	Fiscal Year Beginning March 1, 20XX		
	2018	**2019**	**2020**
Minimum Capital Required	$366	$359	$386
Add: Assets requiring 100% Capital	$77	$80	$82
100% MCT Target	**$443**	**$439**	**$468**
Total Equity: Base Forecast	$194	$213	$230
Additional Total Equity required for 100% MCT Target	**$249**	**$226**	**$238**

Revised Forecasted MCT Upper RSR Targets

Minimum Capital Test

(All figures in $000s)

		2015 - 2016	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020
		Current Period (01)	Current Year (01)	Forecast Year (02)	Forecast Year (03)	Forecast Year (04)
Capital Available:						
Capital available (from page 30.62 - capital available)	01	339,652	340,308	365,931	359,302	386,089
Phase-in of capital available	03	0	0	0	0	0
Total Capital Available	**09**	339,652	340,308	365,931	359,302	386,089
Assets Available:						
Net Assets Available (from page 30.92 - net assets available)	11	0	0	0	0	0
Phase-in of net assets available	13	0	0	0	0	0
Total Net Assets Available	**19**	0	0	0	0	0

Minimum Capital Test: 100% Modeled Capital (Margin) Required

(All figures in $000s)		2015 - 2016	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020
		Current Period (01)	Current Year (01)	Forecast Year (02)	Forecast Year (03)	Forecast Year (04)
Capital (Margin) Required at Target:						
Insurance Risk:						
Premium liabilities	20	78,100	81,838	89,225	93,284	97,567
Unpaid claims	22	172,822	180,736	184,670	183,794	186,252
Catastrophes	24	0	0	0	0	0
Margin required for reinsurance ceded to unregistered insurers	26	0	0	0	0	0
Subtotal: Insurance risk margin	29	250,922	262,574	273,895	277,078	283,819
Market Risk:						
Interest rate risk	30	29,112	1,385	2,935	0	2,060
Foreign exchange risk	32	17,191	20,262	22,235	19,540	22,489
Equity risk	34	141,854	151,771	168,856	156,872	182,321
Real estate risk	36	53,983	60,546	63,993	65,905	68,501
Other market risk exposures	38	0	0	0	0	0
Subtotal: Market risk margin	39	242,140	233,964	258,019	242,317	275,371
Credit Risk:						
Counterparty default risk for balance sheet assets	40	19,266	15,657	18,505	19,278	20,469
Counterparty default risk for off-balance sheet exposures	42	0	0	0	0	0
Counterparty default risk for unregistered reinsurance collateral and SIRs	44	0	0	0	0	0
Subtotal: Credit risk margin	49	19,266	15,657	18,505	19,278	20,469
Operational risk margin	50	65,757	66,841	72,218	72,384	77,098
Less: Diversification credit	52	68,608	68,574	73,740	72,104	77,624
Total Capital (Margin) Required at Target	59	509,477	510,462	548,897	538,953	579,133
Minimum Capital (Margin) Required (line 59 / 1.5)	60	339,652	340,308	365,931	359,302	386,089
Phase-in of Capital (Margin) Required	62	0	0	0	0	0
Total Minimum Capital (Margin) Required	69	339,652	340,308	365,931	359,302	386,089
Excess Capital (Net Assets Available) over Minimum Capital (Margin) Required	79	0	0	0	0	0
MCT (BAAT) Ratio (Line 09 or line 19 as a % of line 69)	90	100.00%	100.00%	100.00%	100.00%	100.00 %

PUB (MPI) 2-26

Volume:	II, INV.1.2	Page No.:	
Topic:	Interest Rate Risk Forecasting		
Sub Topic:	MPI Exhibits 7 and 8		
Issue:	IRFRF		

Question:

a) Please advise of whether the Corporation intends to call Dr. Cleary as a witness at the GRA Hearing.

b) If so, please confirm the specific areas in which the Corporation intends to seek to qualify Dr. Cleary as an expert witness.

Rationale for Question:

To confirm what witnesses the Corporation plans to call at the GRA hearing.

RESPONSE:

a) The Corporation intends to call Dr. Cleary as a witness at the General Rate Application (GRA) hearing.

b) Dr. Cleary is an expert in corporate finance and cost of capital matters generally. Dr. Cleary is a chaired Professor of Finance who has authored or co-authored 13 finance text books, and has published 28 articles dealing with empirical corporate finance and capital market issues.

In this proceeding, the Corporation intends that Dr. Cleary be qualified as an expert in the general area of finance and capital markets, and specifically the predictive power of different interest rate forecasting approaches, and risks to the forecasting of interest rates.

PUB (MPI) 2-27

Volume:	II, INV.1.2	Page No.:	
Topic:	Interest Rate Risk Forecasting Risk Factor		
Sub Topic:	MPI Exhibit 10		
Issue:	Effect of Flat Interest Rates on Net Income		

Question:

With respect to the "Match to Corporate" page of the exhibit, please provide:

a) An updated schedule showing the impacts by individual rating years and the average of rating years.

b) Expanded definitions for the non-ALM accounts listed, including rationale for its designation as non-ALM.

c) Amounts for the ALM and non-ALM accounts listed, cross referenced to exhibits from the financial model.

Rationale for Question:

To understand the Corporation's position as reflected in the exhibit.

RESPONSE:

a) Please see table on the next page.

Net Income
(including 2017 GRA 2% Rate Increase)
(Standard Interest Rate, Match to Corporate)

(C $000,000s)	**2017/18**	**2018/19**	**Avg. of Rating Years**
Standard Interest Rate Forecast			
Net Income (Loss)	**(8.4)**	**7.3**	**(0.6)**
Average Rating Year Impact to Basic Net Income			
ALM Impacts			
Claims Interest Rate Impact	(84.6)	(98.0)	(91.3)
Marketable Bond Impact	(69.9)	(80.6)	(75.3)
ALM Net Impact	**(14.7)**	**(17.4)**	**(16.1)**
Non-ALM Impacts to Basic Net Income			
Interest Income	(3.6)	(7.4)	(5.5)
Equities & Alternatives	1.1	6.0	3.5
Other (Bond Amortization)	(5.2)	(9.0)	(7.1)
Claims Discount Rate Forecast	(6.6)	(5.6)	(6.1)
Expense Forecast	(0.6)	(1.4)	(1.0)
Other Impacts			0.0
Non ALM Net Impacts	**(15.1)**	**(17.3)**	**(16.1)**
Total ALM & Non-ALM Impacts	**(29.7)**	**(34.7)**	**(32.2)**
Flat Interest Rate Scenario			
Net Income (Loss)	**(38.1)**	**(27.3)**	**(32.7)**

b) Assigning a designation as "Non-ALM" results from the assessment of whether an impact can properly be designated as an "ALM Impact". The ALM strategy is meant to reduce the net impact of changes in interest rates on claims liabilities and the gain or loss for marketable bonds (or 'interest rate risk' as defined in *Volume II INV Page 12*). These are the specific impacts which are measured by the two categories under "ALM Impacts". The "Non-ALM Impact" categories are those which are not directly related to the ALM Strategy, and are defined as follows:

Interest Income: Impact of interest rate forecast on marketable bond and MUSH interest income. Higher/lower interest rates increases/decreases interest income.

Equities & Alternatives: Impact to all investment income line items related to equities and alternatives. Different interest rate forecasts cause differences in rebalancing amounts to Canadian and U.S. equities.

Bond Amortization: Impact of higher/lower interest rate forecast on marketable bond amortization.

Claims Discount Rate Forecast: Impact of a changing claims discount rate in a flat interest rate environment. The claims discount rate will decrease as a result of declining MUSH bond yield over time.

Expense Forecast: Impact of higher/lower interest rate forecast has impact on the value of the claims liabilities. The value of the claims liabilities impacts the expense forecast. Higher/lower claims liabilities increases/decreases the expense forecast.

Other Impacts: Other impacts not included in the other categories.

c) The Asset Liability Management (ALM) impacts are found in *Volume II PF.1 Statement of Operations* – see the bottom line titled "Total net positive impact due to interest rates (b) – (a)".

The non-ALM amounts are calculated outside of the model by comparing the results of the base forecast relative to the flat interest rate forecast. There is no exhibit in the financial model for non-ALM impacts.

PUB (MPI) 2-28

Volume:	**MPI Exhibits 9 & 10**	**Page No.:**	
Topic:	**Effect of Flat Interest Rates on Net Income (Match to Corporate)**		
Sub Topic:			
Issue:	**Options for the IRFRF**		

Preamble: The example of the effect of flat interest rates on Net Income (Match to Corporate) provided by the Corporation in MPI Exhibit 10 shows that the estimated separation of this impact between ALM impacts and non-ALM impacts is approximately 50/50.

Question:
Using the Corporation's proposed approach to quantifying the IRFRF from MPI Exhibit 9, approximately what percentile level of interest rate forecast would eliminate approximately 50% of Basic's exposure to interest rate forecasting risk? Please provide supporting documentation.

Rationale for Question:
To relate the Corporation's proposed approach to quantifying the IRFRF with the Corporation's analysis of the effect of flat interest rates on Net Income (Match to Corporate).

RESPONSE:
Interest rate forecasting risk is defined as the difference in forecasted net income when using two different interest rate forecasts (i.e. Standard versus flat). Total interest rate forecasting risk was $32.2 million for the 2017 GRA base forecast (March Standard Interest rate forecast), relative to the flat interest rate scenario.

In order for interest rate forecasting risk to be reduced by 50% from $32.2 million to $16.1 million, the required interest rate increase over the first three years of the forecast is 0.89%. In order to determine the 0.89% interest rate increase, the 3 year interest rate increase was changed by trial and error in the model.

An interest rate increase of 0.89% is approximately the 82nd percentile historical interest rate movement. To determine the historical interest rate movement, the V122487 series from the Bank of Canada was used from January 1956 and ended July 2016. The years 1976 to 1985 (referred to as the stagflation period) were removed from the data set. Please see the 2017 GRA *Volume II RSR.2 DCAT report page 39* for more details on why this data set was used.

PUB (MPI) 2-29

Volume:	Driver Safety Rating	Page No.:	
Topic:			
Sub Topic:			
Issue:	Revenue Forecast		

Question:

a) Please provide a table detailing the assignment of fault in claims in each of the last five years.

	Number of Claims				
At Fault Allocation	**2011/12**	**2012/13**	**2013/14**	**2014/15**	**2015/16**
0%					
>0% & < 50%					
50%					
>50% & < 100%					
100%					
No Fault Assigned					
Total					

b) Please describe any changes in the processes followed by the Corporation in recording mitigating factors related to the recording of claims.

Rationale for Question:

To test the Corporation’s assumed movement of drivers on the DSR scale.

RESPONSE:

a) The tables below show both the number and percentage of collision claims by at fault allocation.

Number of Collision Claims

At Fault Allocation	2011/12	2012/13	2013/14	2014/15	2015/16
0%	68,827	75,389	77,880	69,703	70,716
>0% & < 50%	377	408	365	327	318
50%	2,394	2,553	2,517	2,324	2,251
>50% & < 100%	282	283	213	163	176
100%	44,827	48,834	53,362	44,477	42,936
Total	116,707	127,467	134,337	116,994	116,397

Percentage of Collision Claims

At Fault Allocation	2011/12	2012/13	2013/14	2014/15	2015/16
0%	59.0%	59.1%	58.0%	59.6%	60.8%
>0% & < 50%	0.3%	0.3%	0.3%	0.3%	0.3%
50%	2.1%	2.0%	1.9%	2.0%	1.9%
>50% & < 100%	0.2%	0.2%	0.2%	0.1%	0.2%
100%	38.4%	38.3%	39.7%	38.0%	36.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

b) The Corporation did not make any changes in recording of mitigating factors on collision claims during this period.