2012 DCAT Report Amended

Approved by Board of Directors: October 5, 2012

2012 Dynamic Capital Adequacy Testing Report
Basic Compulsory Automobile Insurance

Manitoba Public Insurance
October 5, 2012

Manitoba Public Insurance

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1.0 Executive Summary

Amendment

The following is an amendment to the 2012 Basic Dynamic Capital Adequacy Testing report issued on May 31, 2012. The amendment is required due to the discovery of a calculation error that materially impacted the forecasted investment income of adverse scenarios involving equity returns. The calculation error resulted in an understatement of assumed equity losses on both the Decline in Equity Markets scenario and the Combined Equity and Claims Incurred scenario. An impact analysis for each of these scenarios is shown in the tables below:

Decline in Equity Markets Scenario – Impact on Retained Earnings (in millions)

	Change in Retained Earnings from Base Forecast				
Adverse Scenarios	2012/13	2013/14	2014/15	2015/16	2016/17
Revised Scenario	$0	($124)	($200)	($229)	($260)
Original Scenario (May 31)	$0	($117)	($190)	($219)	($250)
Difference	$0	($7)	($10)	($10)	($10)

Combined Scenario – Impact on Retained Earnings (in millions)

	Change in Retained Earnings from Base Forecast				
Adverse Scenarios	2012/13	2013/14	2014/15	2015/16	2016/17
Revised Scenario	$0	($159)	($195)	($197)	($200)
Original Scenario (May 31)	$0	($138)	($180)	($187)	($195)
Difference	$0	($21)	($15)	($10)	($5)

As outlined on page 8 of this report, it is recommended that the minimum Rate Stabilization Reserve (RSR) target be set at $200 million for Basic. This minimum level of RSR as at February 29, 2012 would result in a satisfactory financial condition for Basic. The recommendation in the original (May 31, 2012) DCAT report was to set the minimum RSR target at $190 million.

Summary of Findings

I have completed the annual investigation of the future financial condition of Basic Compulsory Autopac Insurance (Basic) as at February 29, 2012 in accordance with accepted actuarial practice in Canada.

I have analyzed the forecasted financial positions of the company during the five year forecast period under a series of scenarios. A description of these scenarios and their impact on the company is included within this report.

The analysis incorporates assumptions relating to business growth, investments, claims frequency and severity, transfer of capital between lines of business and projects, and other internal and external conditions during the forecast period as well as potential management responses to various plausible adverse scenarios. The most significant assumptions are described within this report.

In my opinion, the future financial condition of Basic is not satisfactory because there are plausible adverse scenarios that result in reductions to retained earnings that are greater than the Regulator's maximum allowable Rate Stabilization Reserve (retained earnings).

Winnipeg, Manitoba
October 5, 2012

Luke Johnston
Fellow, Canadian Institute of Actuaries

Base Scenario

Historical Results – From Statement of Operations and Statement of Retained Earnings (in millions)

	2007/08	2008/09	2009/10	2010/11	2011/12
Earned Revenues	$683	$715	$744	$765	$779
Total Claims Costs	$623	$623	$623	$447	$740
Expenses	$99	$104	$117	$116	$124
Investment Income	$109	$4	$84	$88	$80
Net Income	$69	($8)	$88	$290	($5)
IIF Transfers	$15	$16	$2	$0	$0
Rebates/Surcharges	($63)	$0	$0	($322)	($14)
Prior Period Adjust.	($23)	$0	$0	$0	$0
IFRS Adjustments	$0	$0	$0	$16	$0
IT Optimization Fund	$0	$0	$0	($65)	$65
Retained Earnings*	$145	$137	$225	$209	$210
Rate Stabilization Reserve	$127	$135	$154	$144	$156
Excess Retained Earnings**	$0	$0	$0	$0	$54

* Historical retained earnings include appropriations for the Immobilizer Incentive Fund and the IT Optimization Fund.

** 'Excess Retained Earnings' are retained earnings amounts in excess of the maximum Rate Stabilization Reserve target as ordered by the Public Utilities Board.

Base Scenario – From Statement of Operations and Statement of Retained Earnings (in millions)

	2012/13	2013/14	2014/15	2015/16	2016/17
Earned Revenues	$779	$793	$833	$874	$916
Total Claims Costs	$740	$767	$794	$824	$852
Expenses	$124	$120	$126	$130	$135
Investment Income	$80	$88	$95	$102	$104
Net Income	($5)	($6)	$8	$22	$34
Retained Earnings	$205	$200	$208	$231	$264
Rate Stabilization Reserve	$153	$162	$170	$178	$187
Excess Retained Earnings	$52	$38	$38	$52	$77
PUB RSR Range	$77-$153	$81-$162	$85-$170	$89-$178	$93-$187

The base forecast assumes that Basic retained earnings are split into two components: the Rate Stabilization Reserve (RSR) and excess retained earnings. The forecast assumes that all net income is transferred to the RSR up to the Public Utilities Board's (PUB) upper RSR limit. Any amounts above the upper limit are held in excess retained earnings. Except for special circumstances (e.g. the Immobilizer Incentive Fund), excess retained earnings are rebated to policyholders as part of the next General Rate Application (GRA). The base forecast does not include any appropriations to Basic retained earnings. Retained earnings are forecasted to be above the PUB's upper RSR limit over the entire forecast period.

Adverse Scenarios

The actuarial standards of practice require the actuary to test and report on a minimum of three plausible adverse scenarios posing the greatest threat to the insurer. In addition, the actuary must also report on all adverse scenarios that cause MPI Basic to fall below the Regulator's target capital requirement (see Section 3). The table below summarizes the results from the three most adverse scenarios.

Adverse Scenarios – Basic Retained Earnings (in millions)
Assumes 0% rate change and no rebate in 2013/14.

	Retained Earnings				
Adverse Scenarios	2012/13	2013/14	2014/15	2015/16	2016/17
Equity Decline	$205	$76	$8	$1	$4
Combined Scenario	$205	$41	$13	$33	$64
Loss Ratio	$205	$114	$125	$148	$182

As shown in the previous section, the projected excess retained earnings in the 2013/14 fiscal year are $38 million. If a $38 million rebate was issued in 2013/14, then the revised adverse scenario results are (approximately) as follows:

Adverse Scenarios – Basic Retained Earnings (in millions)
Assumes 0% rate change and $38 million rebate in 2013/14.

	Retained Earnings				
Adverse Scenarios	2012/13	2013/14	2014/15	2015/16	2016/17
Equity Decline	$205	$38	($30)	($37)	($34)
Combined Scenario	$205	$3	($25)	($5)	$26
Loss Ratio	$205	$76	$87	$110	$144

Major Solvency Issues

The Equity Decline scenario and the Combined scenario result in reductions to Basic retained earnings of $200 million and $195 million respectively by the end of the 2014/15 fiscal year. Both of these adverse scenarios are in excess of the PUB's projected maximum RSR target of $162 million as of the 2013/14 fiscal year, which is the first year in which these adverse scenarios are assumed to occur.

Based on the PUB's most recent Order, the upper limit of the RSR target is projected at $162 million in 2013/14. Without an Order indicating otherwise, the Corporation should assume that the Regulator will continue to utilize their current RSR methodology at the 2013/14 rate hearings. The base forecast projects 2013/14 retained earnings of $200 million, which is in excess of the PUB target by approximately $38 million. If the excess retained earnings are rebated (consistent with previous PUB Orders), then Basic retained earnings will be below the amount required for a satisfactory opinion.

In Order 162/11, the PUB stated "MPI file with the Board together with next year's GRA an updated DCAT, MCT [Minimum Capital Test] and RA/VAR [Operational Risk Analysis and Value at Risk Analysis], together with the pros and cons of each approach and MPI's position on what methodology would best develop an appropriate RSR target range". The Order indicates that the PUB will reopen the debate on the appropriate RSR target at the 2013/14 rate hearings. The final decision on this matter is not expected until December 2012.

Review of Events since the Previous DCAT Report

The results of the 2011 Basic DCAT report were presented to the Public Utilities Board in October 2011. Although the DCAT report recommended a Rate Stabilization Reserve (RSR) target of at least $210 million, the PUB decided to maintain its existing RSR target range of 10% to 20% of net written premiums (driver and vehicle premiums).

Recommendation

1. Set the minimum Rate Stabilization Reserve (RSR) target at $200 million for Basic. This minimum level of RSR as at February 29, 2012 would result in a satisfactory financial condition for Basic.
2. If the upper RSR target is not changed by the Public Utilities Board, Management should advise the Minister of Finance that the Corporation’s current exposure to equity assets is significantly greater than the amount of protection provided by the Public Utility Board’s upper RSR target.
3. If the RSR falls below the Public Utilities Board’s minimum RSR level, Management should implement a plan to restore the RSR to the minimum regulatory levels.
4. If there is a significant increase in projected claims costs, Management should be prepared to increase rates as quickly as possible.
5. Management should continue to monitor loss cost and premium trends to determine if there are any threats to the financial condition of Basic.
6. Management should continue to monitor its reinsurance coverage as the severity of the modeled adverse scenarios could increase substantially if this coverage is reduced.
7. Management should continue to monitor other important risk factors such as inflation, policy liability risk, and interest rate risk.

2.0 Introduction

Role of the Appointed Actuary

As per Subsection 2520 of the Canadian Institute of Actuaries Standards of Practice:

> The actuary should make an annual investigation of the insurer's recent and current financial position, and financial condition, as revealed by dynamic capital adequacy testing for various scenarios.
>
> The actuary should make a report of each investigation in writing to the insurer's Board of Directors (or to their audit committee if they so delegate) or Chief Agent for Canada. The report should identify possible actions for dealing with any threats to satisfactory financial condition that the investigation reveals.
>
> The actuary should also make an interim investigation if there is a material adverse change in the insurer's circumstances.

Purpose

The purpose of DCAT is to identify plausible threats to satisfactory financial condition, actions that would lessen the likelihood of those threats, and actions that would mitigate a threat if it materialized.

Scope

The DCAT report contains the key assumptions of the base scenario and the plausible adverse scenarios posing the greatest risk to the satisfactory financial condition of the Corporation. The report discloses each of the risk categories considered in undertaking the DCAT analysis, including those identified in the CIA Standards of Practice.

The report contains the plausible adverse scenarios examined that cause the Corporation's retained earnings to fall below zero given the Corporation's current and projected financial position and the Regulator's maximum RSR (retained earnings) target as described in Section 3 of this report.

The DCAT analysis was performed by Luke Johnston, FCIA, FCAS, PRM, Chief Actuary and Director of Pricing and Economics. Mr. Johnston is available to answer any questions in regards to this report and can be reached at the following address:

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Use and Distribution

The DCAT report was prepared for the internal use of Manitoba Public Insurance. A copy of this report may be provided to the Company's external auditors and to the Public Utilities Board.

Process

DCAT has the following key elements:

- Development of a base scenario;
- Analysis of the impact of adverse scenarios;
- Identification and analysis of the effectiveness of various strategies to mitigate risks;
- A report on the results of the analysis and recommendations to the insurer's management and the Board of Directors; and
- An opinion signed by the actuary and included in the report on the financial condition of the insurer.

Method

The Corporation's internal financial model was used to perform the 2012 DCAT analysis.

The Corporation's base scenario was generated through the combined effort of several departments and committees, including:

- Actuarial Services Department
- Investments Department
- Budgeting and Planning Services
- Claims Forecasting Committee
- Revenue Forecasting Committee
- Management Committee

The assumptions and forecasts generated by the above departments and committees are the inputs for the Corporation's financial model. A summary of the base scenario assumptions are contained in Section 4 of this report.

The modeling of plausible adverse scenarios involves reviewing all of the assumptions (or inputs) of the base scenario and determining how they are impacted by the event. A new set of assumptions and forecasts are then generated based on the assumed plausible adverse scenario. These assumptions are then input into the financial model and the results are compared to the base scenario.

Data Sources

To perform this valuation, I have used information provided by:

- Jeannine Savard, Manager, Budgeting and Planning Services
- Glenn Bunston, Manager, Investments
- Tyler Clearwater, Actuarial Analyst, Actuarial Services

3.0 Capital Adequacy Management

Definition of the Minimum Regulatory Capital Requirement

The Public Utilities Board (PUB) in Manitoba sets the Corporation's retained earnings levels under the Basic Compulsory program. Basic retained earnings, net of any special appropriations, are referred to as the Rate Stabilization Reserve (RSR). In 2013/14 the Regulator's projected minimum and maximum allowable RSR levels are $81 million and $162 million respectively, or 10% to 20% of net written premiums (vehicle and driver premiums). These amounts may change at any time by a Board Order.

The assumed minimum and maximum RSR levels in each year are shown in the table below. The calculations assume that the Corporation's applied for 2013/14 overall rate change of 0.0% will be approved by the Public Utilities Board.

Insurance Year	Minimum RSR	Maximum RSR
2012/13	$77M	$153M
2013/14	$81M	$162M
2014/15	$85M	$170M
2015/16	$89M	$178M
2016/17	$93M	$187M

Definition of Satisfactory Future Financial Condition

The Corporation's financial condition is satisfactory if throughout the forecast period it is able to meet all its future obligations under the base scenario and all plausible adverse scenarios, and under the base scenario it meets the minimum regulatory capital requirement.

Expanding on the above definition for MPI Basic:

- "Meet all its future obligations" means that the Rate Stabilization Reserve will remain above zero at all times during the forecast period.
- "Meets the minimum regulatory capital requirement" means that the Rate Stabilization Reserve will remain above the Public Utilities Board minimum RSR targets (as shown in the previous section) at all times during the forecast period.

Materiality

As per Canadian actuarial standards of practice, an omission, understatement or overstatement is material if the actuary expects it materially to affect either the user's decision making or the user's reasonable expectations. We have judgmentally selected a materiality standard of $10 million, which is twice the materiality standard used in the Basic Appointed Actuaries Report. The higher standard reflects the much greater uncertainty associated with the DCAT projections relative to the uncertainty of the base forecast. The materiality standard is approximately equal to 1.3% of net earned revenues for Basic in 2012/13.

Note: The materiality level is not intended to represent the range of reasonable values or the inherent uncertainty in an actuarial estimate.

4.0 Background Discussion

Description of Basic

MPI Basic is the Corporation's compulsory automobile insurance product. The Corporation has a monopoly on the sale of Basic products. The Basic coverages are as follows:

- All perils coverage with a $500 deductible
- No-fault accident benefits (Personal Injury Protection Plan)
- Third Party Liability with a $200,000 limit.

Recent and Current Financial Position

Historical Results – From Statement of Operations (in millions)

	2007/08	2008/09	2009/10	2010/11	2011/12
Earned Revenues	$683	$715	$744	$765	$779
Total Claims Costs	$623	$623	$623	$447	$740
Expenses	$99	$104	$117	$116	$124
Investment Income	$109	$4	$84	$88	$80
Net Income	$69	($8)	$88	$290	($5)
IIF Transfers	$15	$16	$2	$0	$0
Rebates/Surcharges	($63)	$0	$0	($322)	($14)
Prior Period Adjust.	($23)	$0	$0	$0	$0
IFRS Adjustments	$0	$0	$0	$16	$0
IT Optimization Fund	$0	$0	$0	($65)	$65
Retained Earnings*	$145	$137	$225	$209	$210
Rate Stabilization Reserve	$127	$135	$154	$144	$156
Excess Retained Earnings**	$0	$0	$0	$0	$54

* Historical retained earnings include appropriations for the Immobilizer Incentive Fund and the IT Optimization Fund.

** 'Excess Retained Earnings' are retained earnings amounts in excess of the maximum Rate Stabilization Reserve target as ordered by the Public Utilities Board.

Base Scenario

The base scenario for MPI Basic is shown below:

Base Scenario – From Statement of Operations and Statement of Retained Earnings (in millions)

	2012/13	2013/14	2014/15	2015/16	2016/17
Earned Revenues	$779	$793	$833	$874	$916
Total Claims Costs	$740	$767	$794	$824	$852
Expenses	$124	$120	$126	$130	$135
Investment Income	$80	$88	$95	$102	$104
Net Income	($5)	($6)	$8	$22	$34
Retained Earnings	$205	$200	$208	$231	$264
Rate Stabilization Reserve	$153	$162	$170	$178	$187
Excess Retained Earnings	$52	$38	$38	$52	$77
PUB RSR Range	$77-$153	$81-$162	$85-$170	$89-$178	$93-$187

Description of Economic Assumptions in the Base Scenario

Volume growth: The number of insured units (excluding trailers and ORVs) is assumed to increase at 1.75% per year over the entire forecast period, which is consistent with the 3 to 5 year averages. Trailers and ORVs have higher growth rates, but represent less than 1% of annual loss costs.

Upgrade Factor: The average premium can increase or decrease without rate changes as customers' change their vehicle preferences (e.g. SUV's versus cars), where they live (e.g. Winnipeg versus rural), or how they use their vehicle (e.g. all purpose versus pleasure). The upgrade factor (excluding trailers and ORVs) is assumed to be 2.50% per year over the entire forecast period. The 2011/12 actual upgrade factor was 2.60%, but it has been trending down in recent years. The Corporation expects the upgrade factor to stabilize at approximately 2.50%.

Inflation: Projected Consumer Price Inflation is 2.00% in 2012/13 and thereafter. These rates are based on the consensus forecast from various banks and economic forecasting firms rounded to the nearest 25 basis points.

Interest rates and yields: The projected interest rates and yields are shown in the table below. The interest rate forecasts are based on the median forecast from various banks and economic forecasting firms. The returns for equities, real estate, and infrastructure are the Corporation's internal forecasts.

Fiscal Year	Prime Rate	Canadian 10 Year	MUSH Rate	CND/US Equities	Real Estate	Infra-Structure
2012/13	2012/13	3.00%	2.48%	4.23%	6.10%	5.50%
2013/14	2013/14	3.50%	2.95%	4.70%	6.10%	5.50%
2014/15	2014/15	4.58%	3.19%	4.94%	6.10%	5.50%
2015/16	2015/16	5.50%	4.01%	5.76%	6.10%	5.50%
2016/17	2016/17	6.50%	5.03%	6.78%	6.10%	5.50%

*The interest rates and yields in the above table are for the fourth quarter of each fiscal year. The Corporation creates forecasts for each quarter (not shown).

Rate changes

Vehicle premiums: The base forecast includes an 8.0% rate decrease in 2012/13, which has been approved by the Public Utilities Board, and a 0.0% rate change in 2013/14, which has not yet been approved by the Public Utilities Board (expected ruling in December 2012). There are no other rate changes assumed in the forecast period.

Driver premiums: The base forecast includes approved and proposed increases to driver premium rates for demerit drivers in 2012/13 and 2013/14. The 2013/14 rates have not been approved by the Public Utilities Board; however, the increased rates are part of a planned transition to the new Driver Safety Rating program that was introduced in March 2010.

Rebates

The base forecast assumes that no rebates will be ordered by the Public Utilities Board. However, the Corporation's current retained earnings are $54 million above the PUB's RSR target as of the end of 2011/12 and a projected $38 million above the PUB's RSR target in 2013/14. Based on the latest PUB Order, we do not believe it is prudent to assume that these 'excess' funds are available for DCAT testing purposes. Therefore, the DCAT adverse scenarios will be tested against the PUB's projected RSR upper limit in 2013/14, not the Corporation's overall Basic retained earnings.

Reinsurance

The Corporation's reinsurance structure is as follows:

- Catastrophe program in excess of $15 million with a limit of $300 million. MPI retains 1/3 of the $100 million excess of $200 million layer.
- Casualty program with retention of $5 million and a limit of $50 million.

No changes are anticipated for the reinsurance program over the projection period.

Discussion of Prior Year's DCAT Results, Recommendations, and Management Actions

Last year's DCAT report (prepared by Luke Johnston of Manitoba Public Insurance) identified two plausible adverse scenarios that resulted in a negative RSR balance over the forecast period. The two scenarios were the Combined Loss Ratio and Equities scenario and the Decline in Equities scenario. The report indicated that the Corporation would require at least $210 million in the RSR as at February 28, 2011 to achieve a satisfactory financial condition.

In last year's DCAT report it was recommended that Management "advise the Minister of Finance that the Corporation's current exposure to equity assets is significantly greater than the amount of protection provided by the Public Utilities Board's (PUB's) upper RSR target". In this year's base forecast Management has significantly reduced the forecast for equity assets, which has resulted in a reduction to the overall risk level of the Corporation as assessed by the DCAT. The table below shows the change in the equity forecast by year:

Assumed equity assets (in $millions)

Year	Last year's model	This year's model	Percentage Change
2	$545.3	$438.0	-19.7%
3	$499.1	$475.4	-4.7%
4	$527.4	$506.5	-4.0%

5.0 Adverse Scenarios

Summary of Results

A summary of the projected retained earnings for the selected plausible adverse scenarios are shown in the table below. Note: The adverse scenarios listed below are considered to have the most significant impact to the Corporation. All other risk categories are discussed in the 'Analysis of All Property and Casualty Insurer Risk Categories' section of this report.

Retained Earnings (in millions)

Assuming 0% Rate Change and No Rebate in 2013/14

	2012/13	2013/14	2014/15	2015/16	2016/17
Base Forecast	$205	$200	$208	$231	$264
Decline in Equities	$205	$76	$8	$1	$4
Combined Scenario	$205	$41	$13	$33	$64
High Loss Ratio	$205	$114	$125	$148	$182
Major Hail Storm	$205	$122	$126	$144	$172

A comparison of the changes in retained earnings relative to the base forecast is shown in the table below.

Change in Retained Earnings from the Base Forecast (in millions)

Assuming 0% Rate Change and No Rebate in 2013/14

	2012/13	2013/14	2014/15	2015/16	2016/17
Decline in Equities	$0	($124)	($200)	($229)	($260)
Combined Scenario	$0	($159)	($195)	($197)	($200)
High Loss Ratio	$0	($86)	($83)	($82)	($82)
Major Hail Storm	$0	($78)	($82)	($87)	($92)
PUB RSR Upper Limit	$153	$162	$170	$178	$187

As shown in the above table, there are two adverse scenarios (Decline in Equities and Combined Scenario) that result in reductions to retained earnings in excess of the PUB's projected RSR upper limit.

Decline in Equity Markets

Scenario Description

The Corporation's equity assets decline by 40% in 2013/14 and remain at that level for the entire forecast period. The losses are realized as follows: 67% in 2013/14 and 33% in 2014/15.

Ripple Effects

None identified.

Scenario Justification

A historical analysis was conducted of the cumulative four year returns on the TSX from 1919 to present. The 5th percentile event, or alternatively the observation that was worse than 95 percent of the observations, was -43.2%. We selected a 40% decline in equities for modeling purposes.

The realization of losses assumes that 33% of losses are recognized in 2013/14 due to the regular turnover rate of the equity portfolio and another 33% of losses are recognized in 2013/14 due to impairment write downs. The remaining 33% of losses are recognized in 2014/15.

Results – Assuming 0% Rate Decrease and No Rebate in 2013/14

Decline in Equity Markets Scenario (in millions)

	2012/13	2013/14	2014/15	2015/16	2016/17
Earned Revenues	$779	$793	$833	$874	$916
Total Claims Costs	$740	$767	$794	$824	$852
Expenses	$124	$120	$126	$130	$135
Investment Income	$80	($36)	$19	$73	$74
Net Income	($5)	($130)	($68)	($7)	$3
Retained Earnings	$205	$76	$8	$1	$4

Decline in Equity Markets Scenario - Difference from Base Forecast (in millions)

	2012/13	2013/14	2014/15	2015/16	2016/17
Earned Revenues	$0	$0	$0	$0	$0
Total Claims Costs	$0	$0	$0	$0	$0
Expenses	$0	$0	$0	$0	$0
Investment Income	$0	($124)	($76)	($29)	($31)
Net Income	$0	($124)	($76)	($29)	($31)
Retained Earnings	$0	($124)	($200)	($229)	($260)
PUB RSR Range	$77-$153	$81-$162	$85-$170	$89-$178	$93-$187

Under this adverse scenario the Corporation's retained earnings decline by $124 million in 2013/14 and by $200 million by 2014/15 as equity losses are fully realized. Given that the 2013/14 Rate Application is filed in June 2012, we assumed that material Management or regulatory action would not occur until the 2015/16 rating year.

Amended Version

The Decline in Equity Markets scenario was amended when it was discovered, subsequent to the issuance of the original DCAT report, that the calculation of investment income under this scenario was incorrect. A full reconciliation of the revised investment income projections in 2013/14 and 2014/15 is as follows:

- Beginning of year 2013/14 equity balance for Basic: $372.7 million
- A 40% equity decline in 2013/14 = -40% x $372.7 million = -$149.1 million
- Expected investment income from equities in the base forecast: 2013/14: $24.0 million; 2014/15: $26.0 million
- 2013/14 impact from the adverse scenario:
    - 2/3 realization of equity losses of $149.1 million = -$99.4 million
    - Loss of base forecast investment income = -$24.0 million
    - All other financial model adjustments = -$0.7 million
    - Total impact = -$124.1 million
- 2014/15 impact from the adverse scenario:
    - 1/3 realization of equity losses of $149.1 million = -$49.7 million
    - Loss of base forecast investment income = -$26.0 million
    - All other financial model adjustments = -$0.3 million
    - Total impact = -$76.0 million
- Total decline in retained earnings in 2013/14 and 2014/15 = -$124.1 million - $76.0 million = -$200.1 million

Recommendation

The PUB's current and projected RSR upper limits are not sufficient to withstand this adverse scenario. A minimum RSR upper limit of $200 million would be required to achieve satisfactory financial condition. Assuming no rebate, the Corporation's current retained earnings level of $210 million is sufficient to withstand this adverse scenario.

Combined Scenario: Claims Incurred and Equity Decline Scenario

Scenario Description

The Corporation experiences current year combined claims incurred and equity losses (relative to budget) at the 1st percentile level in 2013/14.

Scenario Justification

Integrated Scenario

An integrated scenario is a type of adverse scenario that results when two or more adverse scenarios are combined. The adverse scenarios to be combined may be based on correlated or uncorrelated risk factors but the resulting integrated scenario would be realistic and plausible at the same 1% to 5% probability levels of the single-risk adverse scenarios.

In the Equity Decline scenario and the Loss Ratio scenario we describe the stochastic models used for each of these adverse scenarios. In this section we have run these stochastic models together to produce a combined scenario. The annual impacts of current year claims incurred and equity returns were assumed to be independent of each other.

The table below shows the distribution of the 2013/14 combined scenario simulation results relative to the base forecast. The results assume full realization of equity losses in the current year. Negative figures represent net losses and positive figures represent net gains. The losses are net of reinsurance recoveries.

Percentile	Combined Scenario Change on 2013/14 from Base Forecast
1st	-$180,661,152
5th	-$126,422,123
10th	-$98,413,756
25th	-$52,037,265
50th	$2,397,586
75th	$56,756,891
90th	$104,059,998
95th	$132,093,958
99th	$182,081,628

We selected the 1st percentile of the above distribution for financial modeling purposes. The selected adverse scenario assumes a:

- 30.4% decline in equity assets, with 67% realized in 2013/14 and 33% realized in 2014/15. Approximate impact: $139 million reduction from base forecast by 2014/15.
- $56 million increase in claims incurred over the base forecast by 2014/15

Results – Assuming 0% Rate Decrease and No Rebate in 2013/14

Combined Scenario (in millions)

	2012/13	2013/14	2014/15	2015/16	2016/17
Earned Revenues	$779	$793	$833	$874	$916
Total Claims Costs	$740	$826	$791	$823	$852
Expenses	$124	$120	$126	$130	$135
Investment Income	$80	($11)	$56	$99	$102
Net Income	($5)	($164)	($28)	$20	$31
Retained Earnings	$205	$41	$13	$33	$64

Combined Scenario - Difference from Base Forecast (in millions)

	2012/13	2013/14	2014/15	2015/16	2016/17
Earned Revenues	$0	$0	$0	$0	$0
Total Claims Costs	$0	$60	($4)	($1)	$0
Expenses	$0	$0	$0	$0	$0
Investment Income	$0	($99)	($40)	($3)	($2)
Net Income	$0	($159)	($36)	($2)	($2)
Retained Earnings	$0	($159)	($195)	($197)	($200)
PUB RSR Range	$77-$153	$81-$162	$85-$170	$89-$178	$93-$187

The results of the Combined scenario indicate a decrease in retained earnings of $159 million in 2013/14 and $195 million in 2014/15 (assuming no management action). We assumed that material Management or regulatory action would not occur before the 2015/16 fiscal year, since the 2014/15 Rate Application is prepared in the first few months of 2013/14 (i.e. likely prior to knowledge of the magnitude of the adverse scenario).

Amended Version

The Combined scenario was amended when it was discovered, subsequent to the issuance of the original DCAT report, that the calculation of investment income under this scenario was incorrect. A full reconciliation of the revised investment income and claims costs impacts in 2013/14 and 2014/15 is as follows:

Calculation of 2013/14 and 2014/15 claims incurred impact on the financial statements from the adverse scenario:

- Increase in ultimate undiscounted claims incurred from the stochastic model simulation: -$46.7 million
- 2013/14 Actuarial provisions for discounting and PfADs: -$7.4 million
- 2013/14 increase to Internal Claims Adjusting Expenses: -$5.7 million
- 2013/14 Total increase to claims incurred over the base forecast: -$59.8 million
- 2014/15 decrease in claims incurred over the base forecast from favourable development: +$3.6 million.

Calculation of the 2013/14 and 2014/15 investment income impact on the financial statements from the adverse scenario:

- Beginning of year 2013/14 equity balance for Basic: $372.7 million
- A 30.4% decline in equities in 2013/14 = -30.4% x $372.7 million = -$113.3 million
- 2013/14 expected investment income from equities in the base forecast: $24.0 million
- 2013/14 impact from the adverse scenario:
    - 2/3 realization of $113.3 million equity decline = -$75.5 million
    - Loss of base forecast investment income = -$24.0 million
    - All other financial model adjustments = +0.3 million
    - Total impact = -$99.2 million
- 2014/15 impact from the adverse scenario:
    - 1/3 realization of $113.3 million equity decline = -$37.8 million
    - Loss of base forecast investment income = $0 (assumed base forecast returns of 6.1% in 2014/15; assumed portfolio rebalanced to base forecast levels at beginning of 2014/15)
    - All other financial model adjustments: -$1.9 million
    - Total impact = -$39.7 million
- Total decline in retained earnings in 2013/14 and 2014/15 from Investments = -$99.2 million - $39.7 million = $138.9 million

Calculation of overall impact on retained earnings:

- 2013/14: -$59.8 million (claims) - $99.2 million (investment income) = -$159.0 million
- 2014/15: +$3.6 million (claims) - $39.7 million (investment income) = -$36.1 million
- Combined 2013/14 and 2014/15 impact = -$159.0 million - $36.1 million = - $195.0 million

Recommendation

The results of the Combined scenario indicate a decrease in retained earnings of $159 million in 2013/14 and $195 million in 2014/15 (assuming no management action). The current and project PUB upper RSR targets are not sufficient to withstand this scenario. However, the Corporation's current retained earnings of $210 million would be sufficient to withstand this scenario

High Loss Ratio

Scenario Description

The 2013/14 insurance year experiences Basic ultimate losses that are $67 million higher than forecast on an ultimate basis. The adverse scenario represents the 2013/14 expected Basic losses for all coverages combined at the 99th percentile level.

Ripple Effects

Increase in Future Driver Premiums: The high loss ratio scenario is mainly the result of an increase in PIPP claims severity. Therefore, the increase in at-fault collision claim frequency under this scenario was deemed to not have a material impact on driver premiums or the average vehicle premium discount.

Claims Expenses: The claims expenses, including internal claims adjustment costs (ICAC), were adjusted proportionally based on the increased level of claims costs.

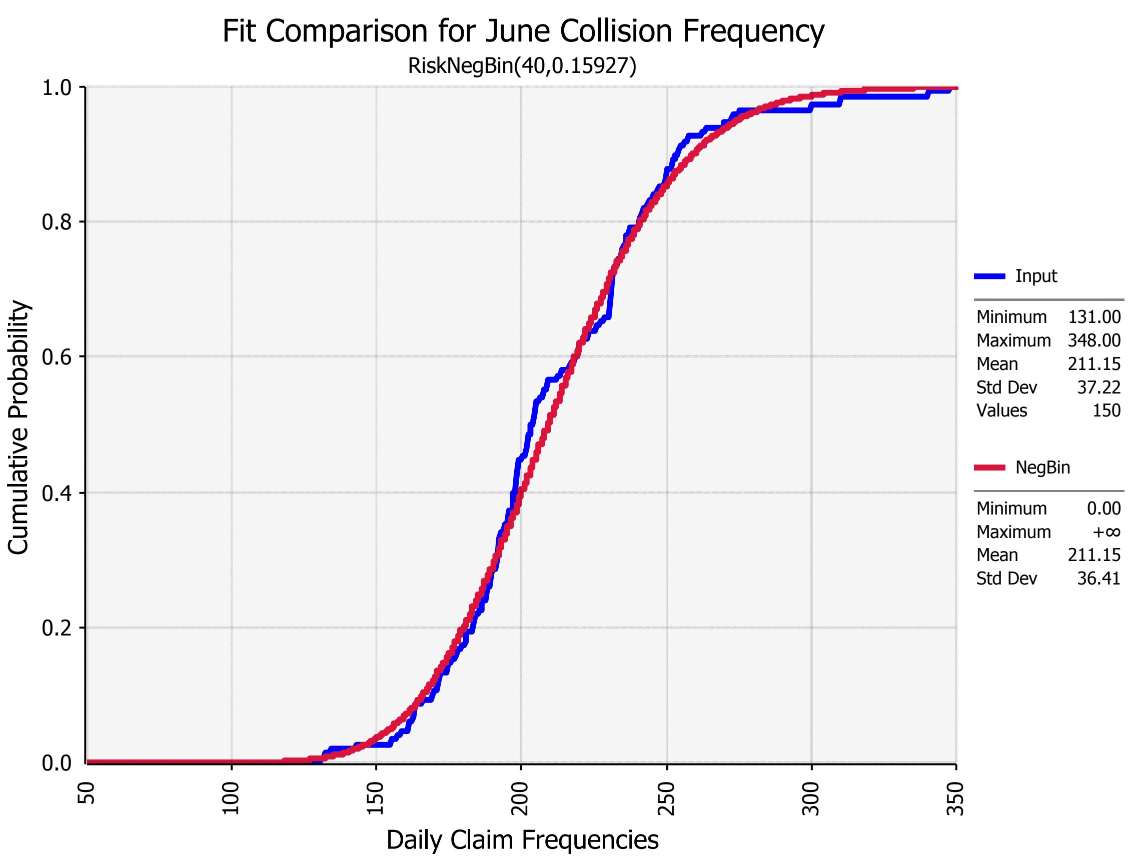
Actuarial Adjustments: The claims impact was simulated based on ultimate loss costs; however, these ultimate losses must be discounted and adjusted for actuarial provisions for adverse deviation (per actuarial standards of practice) before being input into the financial model. Since a large portion of this adverse scenario is the result of increased PIPP losses (which have larger provisions for adverse deviation than other coverages), the claims incurred impact on an accepted actuarial practice basis is greater than $67 million.

Reinsurance: The scenario assumes a $5 million reinstatement premium in 2013/14 due to a $44 million hail storm. The adverse scenario was assumed to have no impact on future reinsurance premiums.

Scenario Justification

Claim Frequency Simulation

The claims cost model was built to simulate daily accident frequencies based on historical driving patterns. To best represent the change in frequencies as the seasons change, frequencies were modeled on a monthly basis. Each month's frequency data was fit to a distribution based on the best fit provided by @RISK (statistical software) and judgment (e.g. for distribution characteristics that were not accurately modeled by any statistical distribution).



A negative binomial distribution was used for all collision months to model frequency. The negative binomial distribution fit the data very well as shown above. Daily claim counts were then simulated for 5,000 years and then adjusted for any increase in earned units.

Frequencies were correlated among each other in collision, non-hail comprehensive, PIPP, and property damage based on of the historical claim frequencies.

Frequencies were simulated using the same method as described above for collision, PIPP, non-hail comprehensive, and property damage.

For hail, the claims frequency modeling is described in the Large Hail Storm adverse scenario.

Claims frequency was not simulated for Basic public liability claims as there is very limited historical data. Instead, overall ultimate loss costs were simulated.

Claim Severity Simulation

A claim severity model was built to simulate the severities of the claims counts in the frequency scenario. The simulation model separates accident severity by coverage: collision, property damage, hail, non-hail comprehensive, and PIPP. Physical damage severities are extremely consistent, while injury severities are highly variable. Public Liability severity was not simulated because of limited data. The following table shows the historical distributions of claims severities over the past 5 years.

Historical Distribution of PIPP, PD and Collision claims (@ 12-Months)

Range	Collision	Property Damage	PIPP	Non-Hail Comp
0-10K	95.700%	99.400%	88.400%	98.800%
10K-50K	4.200%	0.500%	9.400%	1.100%
50K-100K	0.100%	0.000%	1.300%	0.100%
100K-250K	0.000%	0.100%	0.500%	0.000%
250K-500K	0.000%	0.000%	0.100%	0.000%
500K-1M	0.000%	0.000%	0.200%	0.000%
1M - 2M	0.000%	0.000%	0.000%	0.000%
2M - 3M	0.000%	0.000%	0.000%	0.000%
3M - 5M	0.000%	0.000%	0.100%	0.000%
Average	$2,786	$885	$8,047	$1,038
Standard Dev.	$3,510	$2,485	$48,232	$2,310

*The discrete ranges in the table below are just for summarization purposes; the actual severity simulations use continuous distributions.

The hail severity simulation is described in the Large Hail Storm adverse scenario.

12-Month to Ultimate Simulation

Incurred loss development is difficult to simulate there is often a very limited amount of historical data for modeling purposes (especially in the tail of the distribution where there may be no historical experience). Further, incurred loss development factors from 2005 and prior are no longer useable for PIPP coverages as reserving practices have changed significantly after the Corporation introduced new PIPP reserving procedures in 2005. To work around this issue, we use the historical 12-month to ultimate factors, which were not significantly impacted by the reserving changes, to simulate the 12 month to ultimate development factor distribution. We selected a Normal distribution based on the results of @Risk and judgment.

The Corporation ran 5,000 simulations of 2013/14 ultimate claims costs for Basic (net of reinsurance). The model results at various percentile levels are shown in the table below:

Percentile	2013/14 Ultimate Losses ($000)	$ Deviation from Base Forecast	% Deviation from Base Forecast
1st	$520,752	($53,332)	-9.29%
10th	$542,659	($31,425)	-5.47%
25th	$555,610	($18,474)	-3.22%
50th	$570,748	($3,336)	-0.58%
75th	$585,742	$11,658	2.03%
90th	$600,928	$26,844	4.68%
99th	$641,556	$67,472	11.75%
Base Forecast	$574,084		

For financial modeling we selected the 99th percentile of the above distribution. The overall impact from this scenario on 2013/14 net income after considering all associated ripple effects is approximately $86 million (approximately $67 million from claims costs, $8 million due to claims expenses and ICAC, $6 million due adjustment for discounting and actuarial provisions, $5 million from reinsurance reinstatement premiums).

Results – Assuming 0% Rate Decrease and No Rebate in 2013/14

High Loss Ratio Scenario (in millions)

	2012/13	2013/14	2014/15	2015/16	2016/17
Earned Revenues	$779	$788	$833	$874	$916
Total Claims Costs	$740	$848	$791	$823	$852
Expenses	$124	$121	$126	$130	$135
Investment Income	$80	$88	$95	$102	$104
Net Income	($5)	($92)	$12	$23	$33
Retained Earnings	$205	$114	$125	$148	$182

High Loss Ratio Scenario – Difference from Base Forecast (in millions)

	2012/13	2013/14	2014/15	2015/16	2016/17
Earned Revenues	$0	($5)	$0	$0	$0
Total Claims Costs	$0	$81	($3)	($1)	$0
Expenses	$0	$0	$0	$0	$0
Investment Income	$0	$0	$0	$0	$0
Net Income	$0	($86)	$3	$1	($0)
Retained Earnings	$0	($86)	($83)	($82)	($82)
PUB RSR Range	$77-$153	$81-$162	$85-$170	$89-$178	$93-$187

Under this adverse scenario the Corporation's retained earnings decline by $86 million in 2013/14, which is significantly than the amount of protection provided by the PUB's upper RSR target.

Recommendation

The Corporation has sufficient retained earnings to withstand an increase in current year claims incurred at the 99th percentile level.

Large Hail Storm

Scenario Description

The 2013/14 insurance year experiences $300 million in Basic hail losses on an ultimate basis, which includes a single $293 million hail storm in August 2013.

Ripple Effects

Reinsurance: Reinsurance reinstatement premiums were assumed to be $12.0 million in 2013/14. Future catastrophe reinsurance premiums were assumed to increase by 40% over the base forecast starting in 2014/15.

Claims Expenses: The cost of additional claims staff was assumed to be $7 million in 2013/14, which is included as part of total claims costs.

Scenario Justification

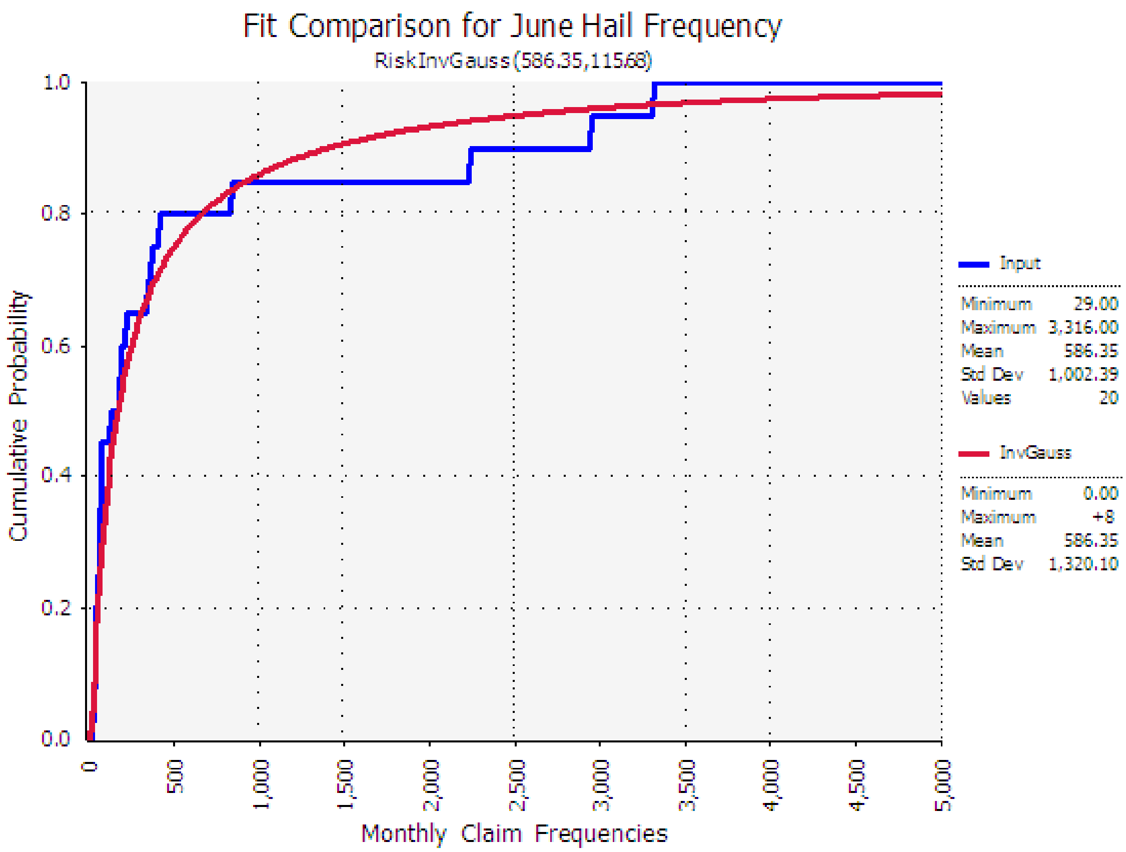
Size of the Hail Storm

The table (on the following page) shows the historical hail claims counts and direct loss costs for MPI Basic since 1992/93. The historical losses were then trended forward based on an assumed trend rate of 5.25%, which is the long term trend for comprehensive losses for MPI Basic.

Loss Year	Earned Units*	Hail Claim Count	Claims per 100 Units	Total Incurred	Trended Incurred	Trended Severity
1992	602,172	3,198	0.531	$5,014,864	$13,258,034	$4,146
1993	611,204	214	0.035	$388,124	$974,918	$4,556
1994	620,372	2,379	0.383	$4,672,663	$11,151,678	$4,688
1995	629,678	3,543	0.563	$7,321,569	$16,601,901	$4,686
1996	639,123	23,722	3.712	$49,837,272	$107,370,710	$4,526
1997	648,710	2,143	0.330	$3,652,380	$7,476,278	$3,489
1998	659,077	1,743	0.264	$2,523,826	$4,908,477	$2,816
1999	666,147	988	0.148	$1,702,540	$3,146,027	$3,184
2000	670,794	910	0.136	$1,679,639	$2,948,894	$3,241
2001	680,956	11,252	1.652	$22,590,354	$37,682,880	$3,349
2002	692,871	642	0.093	$1,363,251	$2,160,601	$3,365
2003	705,082	1,807	0.256	$3,898,534	$5,870,542	$3,249
2004	713,672	363	0.051	$1,090,838	$1,560,684	$4,299
2005	719,858	2,857	0.397	$6,607,999	$8,982,611	$3,144
2006	728,490	3,012	0.413	$8,256,282	$10,663,384	$3,540
2007	744,882	16,508	2.216	$51,164,439	$62,785,106	$3,803
2008	759,134	1,110	0.146	$3,593,545	$4,189,762	$3,775
2009	770,199	10,894	1.414	$31,272,194	$34,641,968	$3,180
2010	783,648	6,525	0.833	$21,314,128	$22,433,120	$3,438
2011	802,782	7,320	0.912	$27,327,171	$27,327,171	$3,733

* Earned units were not available prior to 1997. We assumed a growth rate of 1.50% per year prior to 1997.

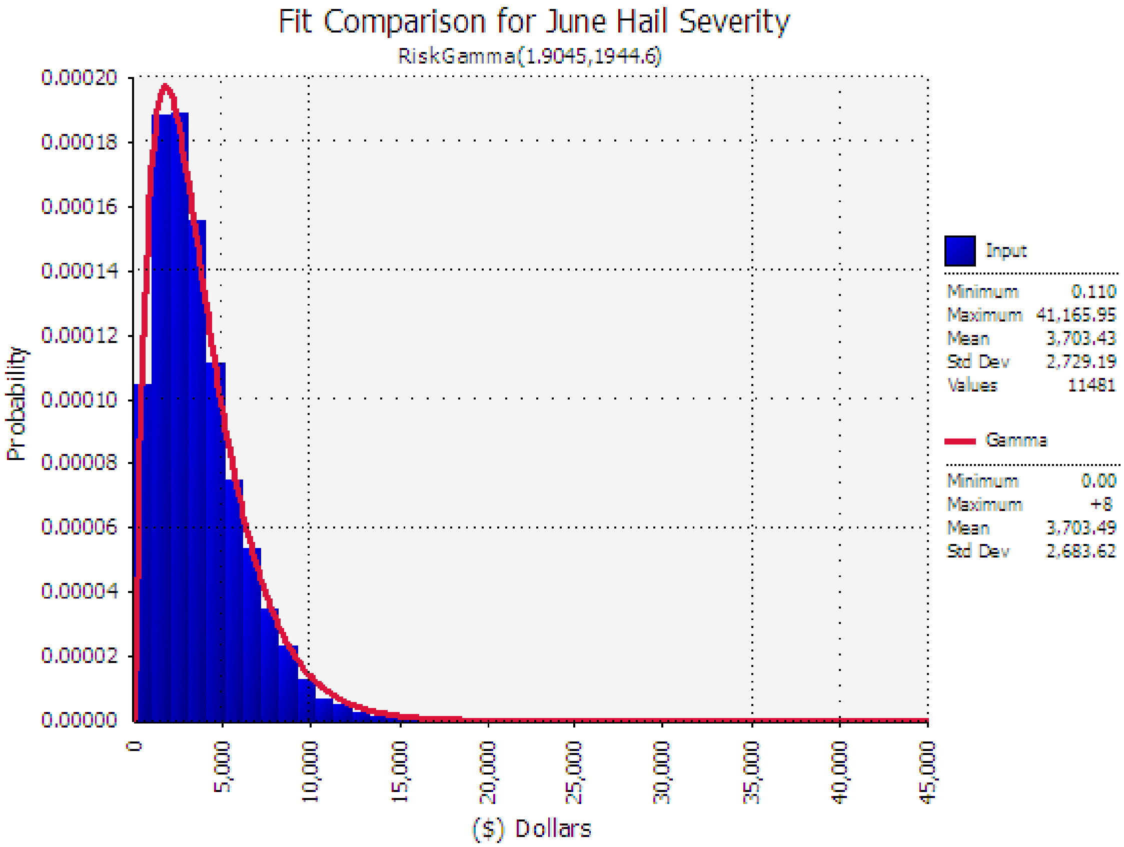
Distributions were selected for each month for hail frequency and severity. The monthly data was then trended forward for increases in earned units. The distributions were selected using @RISK and judgment to provide the best fit to the historical data. For example, the graph below shows the fit between the actual (input) and modeled (InvGauss) hail frequency for the month of June.



An absolute cap of 10 claims per 100 units was placed on the distribution to recognize that the number of claims is limited by the number of exposed vehicles. A frequency of 10 claims per 100 units would be approximately equal to 20% of Winnipeg passenger vehicles experiencing a hail claim in a given month. This selection was judgmental, but does not impact the selected scenario at the 99th percentile level.

Hail severity was fitted for each month as to best capture the change in severity of a hail storm from season to season. The most common distributions used were Pearson and Gamma. @RISK and judgment were used to select a model that provided the best fit to the historical data.

For example, the graph below shows the actual trended severity (input) compared to that assumed in the model (Gamma) for the month of June.



The model was run for 25,000 simulations with the results shown in the table below. Frequency and severity were assumed to be independent. Frequency for each month was simulated, while the severity was simulated based on how many claims there were in that particular month.

The table below shows the results of the hail simulation. The net loss distribution assumes that all reinsurance recoveries are collected. The 'actual net trended losses' represent the expected net losses in prior years accident years based on the Corporation's current reinsurance program.

Annual Hail Losses	Simulated Direct Losses	Actual Direct Trended Losses*	Simulated Net Losses	Actual Net Trended Losses
< $10M	41.70%	50.50%	41.70%	50.50%
$10M to $25M	33.70%	25.90%	49.30%	35.10%
$25M to $50M	14.30%	15.60%	8.00%	14.40%
$50M to $100M	6.20%	7.10%	0.30%	0.00%
$100M to $200M	2.60%	0.90%	0.70%	0.00%
$200M to $300M	0.60%	0.00%	0.00%	0.00%
$300M+	0.90%	0.00%	0.00%	0.00%

* Using a selected trend of 5.25% per year.

The results show that the simulated hail losses are very similar to the actual trended hail losses for annual hail losses of $50 million or less. The simulation is used to estimate the likelihood of storms in the tail of the distribution.

The 99th percentile of the distribution was selected for financial modeling purposes. On a direct basis, the 99th percentile results in $300 million of Basic losses; however, after reinsurance the net claims costs to Basic are approximately $74 million ($7 million from non-catastrophic hail and $67 million from the single $293 million Basic hail storm).

Reinsurance Premiums

The estimated reinstatement premiums based on a $293 million (Basic) hail storm in 2013/14 are $12.0 million.

The increase in future reinsurance rates after a storm of this magnitude was judgmentally selected at 40%.

Claims Expenses

The 2007 Dauphin hail storm resulted in approximately $1 million in additional expenses. This scenario considers a hail storm that is about 5 times larger than the Dauphin storm. Additional claims expenses were judgmentally set at $7 million.

Results – Assuming 0% Rate Decrease and No Rebate in 2013/14

Large Hail Storm Scenario (in millions)

	2012/13	2013/14	2014/15	2015/16	2016/17
Earned Revenues	$779	$781	$828	$869	$911
Total Claims Costs	$740	$831	$793	$824	$852
Expenses	$124	$122	$126	$130	$135
Investment Income	$80	$88	$95	$102	$104
Net Income	($5)	($84)	$5	$17	$28
Retained Earnings	$205	$122	$126	$144	$172

Large Hail Storm Scenario – Difference from Base Forecast (in millions)

	2012/13	2013/14	2014/15	2015/16	2016/17
Earned Revenues	$0	($12)	($5)	($5)	($6)
Total Claims Costs	$0	$65	($1)	($0)	($0)
Expenses	$0	$1	$0	$0	$0
Investment Income	$0	$0	$0	$0	$0
Net Income	$0	($78)	($4)	($5)	($6)
Retained Earnings	$0	($78)	($82)	($87)	($92)
PUB RSR Range	$77-$153	$81-$162	$85-$170	$89-$178	$93-$187

Under this adverse scenario the Corporation's retained earnings decline by $78 million in 2013/14, which is significantly less than the amount of protection provided by the PUB's upper RSR target.

Recommendation

The Corporation has sufficient retained earnings to withstand this adverse scenario.

Analysis of All Property and Casualty Insurer Risk Categories

Catastrophe

The detailed assumptions and results of this scenario are presented in section 6.

Loss Ratio

The detailed assumptions and results of this scenario are presented in section 6.

Underestimation of Policy Liabilities Risk

Total Claim Liabilities compared to the RSR Target

As of February 28, 2012, MPI Basic net claim liabilities were $1,345 million. The forecasted Public Utilities Board maximum RSR in 2013/14 is $162.0 million, which is equivalent to 12.0% of total claim liabilities.

Interest Rate Adjustments

As of February 28, 2012, claim liabilities were discounted at a nominal rate of 3.55% based on the duration weighted average yield of the Corporation's fixed income portfolio net of investment management fees. A decline in interest rates of more than 130 basis points would be required to increase the claim liabilities by more than $160 million. Given the current level of interest rates, this type of decline was not seen as plausible. Also, the Corporation's asset and liability management strategy would be expected to offset approximately 80% of this increase as the market value of bonds will also increase as interest rates change. The Basic claim liabilities are matched 100% to the fixed income portfolio, which has a duration about 80% to that of claim liabilities.

Loss Development Factors

The Corporation selects loss development assumptions on a best estimate basis using the observed historical data. Although there is variability in the observed loss development patterns, the recent historical experience has been relatively stable. PIPP loss development is the most variable; however, these development patterns have also stabilized considerably since the introduction of new reserving guidelines in 2005. The Corporation will continue to update the observed loss development assumptions over time, and these updates are not expected to generate sudden financial impacts that would be characterized as a top three adverse scenario

The future (unknown/unobserved) loss development patterns present the greatest risk to the Corporation in terms of adverse increases in claim liabilities. Currently, this 'unknown' period is from (approximately) 20 years after the date of loss until all claims are closed. The Corporation has no observed loss development experience beyond this period. Claims that remain open beyond 10 years are from a very small group of seriously injured claimants (currently about 350 claimants) that are expected to receive claim benefits for life. The loss payments to these claimants will likely extend for 30 to 50 years after the original date of loss.

The Corporation uses a 'disabled' mortality table (i.e. based on an external study of long term disability claimants) to estimate the case reserves on lifetime claims. To test the mortality table, we conducted a comparison of actual versus expected claimant terminations (claim closed for any reason) for claims that remained open 10 years or more after the date of loss. The results are below.

Actual versus Expected Terminations by Calendar Year for PIPP Claims 10 years or older

Calendar Year	Number of claimants start of year	Actual terminations	Current Table Expected Terminations	Actual Termination Rate	Expected Termination Rate	Difference
2004	63	4	2	6.35%	3.17%	3.17%
2005	129	13	4	10.08%	3.10%	6.98%
2006	162	17	5	10.49%	3.09%	7.41%
2007	203	13	7	6.40%	3.45%	2.96%
2008	265	21	9	7.92%	3.40%	4.53%
2009	302	19	11	6.29%	3.64%	2.65%
2010	342	13	12	3.80%	3.51%	0.29%
Total	**1124**	**87**	**38**	**7.74%**	**3.38%**	**4.36%**

In all years tested (2004 to 2010) actual terminations were greater than the number predicted by the Corporation's mortality table. The results indicate that to date the mortality table appears to be conservative. A paired t-test indicates that the likelihood that the actual observed termination rate is less than the expected termination rate has a probability of less than 0.5%.

Although the claim termination rates appear to be conservative, it is the incurred losses that are of most concern to the Corporation. The table below shows the growth in reported incurred losses after 10 years for coverages with lifetime payments.

Reported Incurred Losses for Weekly Indemnity and Accident Benefits Other Indexed based on the Number of Years since the Accident Year

Accident Year	10 yrs	11 yrs	12 yrs	13 yrs	14 yrs	15 yrs	16 yrs	17 yrs	18 yrs
94/95				121,742	117,810	115,987	117,228	119,498	121,343
95/96			147,281	146,880	148,068	147,598	142,562	143,686	
96/97		95,383	94,465	91,895	89,243	90,003	90,108		
97/98	98,440	98,530	98,910	97,394	97,221	95,668			
98/99	111,939	110,326	109,071	105,863	105,523				
99/00	103,805	103,348	103,077	104,641					
00/01	104,500	103,578	105,204						
01/02	95,479	95,449							
02/03	106,378								
Average Loss Development from Period to Period									
	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	Average
	-0.21%	-0.13%	-1.19%	-1.16%	-0.65%	-0.74%	1.36%	1.54%	-0.15%

Although the actual termination rates are higher than expected in all years, the changes in claims incurred are not favourable in all years. If the mortality table accurately matches claimant termination rates, we would expect an average period-to-period loss development close to 0.0%. The incurred loss development has averaged lower than unity for years 10 to 16, which is consistent with the analysis on termination rates; however, in recent years the incurred development has shown deteriorating development above unity.

It is difficult, if not impossible, to simulate the loss development experience of the Corporation's pool of lifetime claimants. Unknown future medical improvements, changes in claimant needs as they age, and increases in the cost of services are just a few examples of some of the unknown variables. The Corporation is committed to reflecting the actual development experience of claimants as it becomes available. This approach will gradually move the estimate liabilities closer (up or down) to the actual, but currently unknown, ultimate value. However, beyond the observed loss development period the Corporation has relied on the mortality table projections to provide reasonable estimates.

Currently the Corporation holds a cumulative tail development factor (i.e. development in the unknown period) of +4.94% (1.0494) for Accident Benefits Other Indexed and 1.63% (1.0163) for Weekly Indemnity. Relative to an assumption of no growth, these tail factors account for approximately $60 million in additional development (undiscounted) over the tail period. An increased to the tail factors of an additional 10% (1.10) would be required to cause an increase in claim liabilities (undiscounted) equal to the PUB's current upper RSR target of $156 million. However, because the actual development experience of lifetime claimants will be gradually recognized over time (i.e. as loss development experience emerges), it is very unlikely that such a change would occur suddenly (i.e. in one year).

Based on the evidence presented above, we believe that a sudden and significant increase in loss development assumptions (beyond current estimates) is highly unlikely. We have judgmentally determined that policy liabilities do not represent a top three adverse scenario.

Government and Political Action

We assumed that it was very unlikely that government action (e.g. retroactive increase in benefits) that resulted in a significant impact to existing and/or future claim liabilities would be made without significant advance notice to the Corporation.

Inflation Risk

The Corporation tested a sustained increase in inflation of 2.7% from 2013/14 to 2016/17. The scenario was based on a simulation of cumulative four-year inflation growth based on the observed Canadian consumer price inflation from 1991 to present. The 99th percentile of the simulation was an average four-year inflation rate of 2.7% per year. The impact of the scenario was an approximately $50 million decrease in retained earnings in 2013/14, which was not a top three adverse scenario to the Corporation.

Premium Risk

MPI Basic is a monopoly insurance provider of compulsory automobile insurance. Premium risk is not a significant risk factor.

Reinsurance Risk

As of February 29, 2012 MPI Basic had approximately $24 million in ceded claim liabilities. The maximum exposure to one reinsurer is approximately 12% for the catastrophe program and 30% for the casualty program (assuming a loss that exceeds the highest layer of coverage). The impact of any reinsurance risk scenario is not a top three adverse scenario for the Corporation.

Investment Risk

Equities: This risk was analyzed in Section 6.

Fixed Income: The Corporation has an asset liability strategy that requires (on a corporate basis) the average duration of bonds to be within 2.0 years of the average duration of total claim liabilities. On a Corporate basis, the average duration of claim liabilities is 8 to 9 years; however, for Basic the average duration of claim liabilities is approximately 9 to 10 years. The average duration of bonds is approximately 6 to 7 years. Therefore, changes in interest rates should have a greater impact on liabilities than on assets.

Based on the above, a decrease in interest rates will be more adverse to the Corporation because the present value of claim liabilities will increase more than the market value of assets increase. With current Government of Canada 10 year bond rates near all time lows, we believe a significant decline in interest rates is not plausible at the 1% probability level.

Other Asset Categories: There are several other asset categories included in the base forecast that were not discussed as part of an adverse scenario, the most significant being real estate which is assumed to represent approximately 10% of the portfolio by the end of 2012/13. The potential risk represented by the other asset categories was not determined to be a top three adverse scenario.

Off-Balance Sheet Risk

None of the following off-balance sheet items were determined to be significant risk factors for MPI Basic:

- Structured settlements
- Contingent liabilities or losses
- Derivative instruments
- Pension underfunding

Related Company Risk

We had discussions with Management about the plausibility of MPI Basic transferring retained earnings to the Corporation's Extension or Special Risk Extension lines of business. This scenario was seen as not plausible.

IFRS

The final standards for IFRS 4 Phase II have not been finalized; however, two areas of concern based on the initial IFRS exposure draft are the possibility of discounting claim liabilities at the risk free rate and changing the provisions for adverse deviations on claim liabilities.

We analyzed the impact of changing the current liability discount rate, which is calculated as the weighted average yield of the bond portfolio, to the average yield on a portfolio of Government of Canada bonds with similar duration to the claim liabilities (i.e. a risk free rate). As at February 2012, the Corporation's Government bond holdings had an average yield to maturity of 2.79%, while the overall duration weighted average yield of the bond portfolio was 3.65% (excluding investment management fees). Assuming similar durations for each bond category, the claim liability discount rate could decline by approximately 86 basis points and increase claim liabilities by approximately $90-$100 million. Although this amount is substantial, the Corporation should have at least a year to prepare for this impact and possibly make changes to its asset and liability management strategy. It is also unclear whether IFRS will result in changes to other potentially offsetting valuation factors (e.g. as at February 2012, MPI Basic has an interest rate provision for adverse deviation of over $140 million).

The provisions currently used in the valuation of policy liabilities for MPI Basic are already at, or close to, the highest recommended levels under Canadian Institute of Actuaries Standards of Practice. We expect that the provisions required under IFRS are much more likely to lower the amounts currently set aside for adverse deviations than they are to increase these amounts.

6.0 Forecasted Financial Statements

Exhibit 1a Base Forecast
STATEMENT OF OPERATIONS

BASIC

Actual 2011/12	($ in thousands)	Forecast 2012/13	Outlook 2013/14	2014/15	2015/16	2016/17
-4.00%		-8.00%	0.00%	0.00%	0.00%	0.00%
$		$	$	$	$	$
	Net Premiums Written					
760,039	Motor Vehicles	729,600	761,582	794,869	828,408	864,072
26,593	Drivers	33,505	44,498	51,543	57,649	63,506
(6,679)	Reinsurance Ceded	(9,422)	(13,687)	(14,979)	(15,820)	(16,582)
779,953	**Total Net Premiums Written**	**753,683**	**792,393**	**831,433**	**870,237**	**910,996**
	Net Premiums Earned					
748,948	Motor Vehicles	743,698	746,870	779,557	812,980	847,667
24,037	Drivers	29,688	39,002	48,020	54,596	60,578
(11,308)	Reinsurance Ceded	(12,201)	(13,686)	(14,978)	(15,819)	(16,581)
761,677	**Total Net Premiums Earned**	**761,185**	**772,186**	**812,599**	**851,757**	**891,664**
18,736	Service Fees & Other Revenues	17,767	21,061	20,615	22,448	24,670
780,413	**Total Earned Revenues**	**778,952**	**793,247**	**833,214**	**874,205**	**916,334**
	Claims					
612,037	Net Claims Incurred	612,334	638,142	661,812	686,137	711,718
105,924	Claims Expense	112,622	114,681	119,070	124,652	126,797
15,038	Road Safety/Loss Prevention	14,833	13,779	13,465	13,253	13,405
732,999	**Total Claims Costs**	**739,789**	**766,602**	**794,347**	**824,042**	**851,920**
	Expenses					
62,879	Operating	61,880	63,166	65,894	67,412	69,629
41,033	Commissions	35,555	30,455	31,730	33,165	34,637
22,766	Premium Taxes	23,203	23,575	24,826	26,026	27,246
3,433	Regulatory/Appeal	3,231	3,297	3,363	3,431	3,500
130,111	**Total Expenses**	**123,869**	**120,493**	**125,813**	**130,034**	**135,012**
(82,697)	**Underwriting Income (Loss)**	**(84,706)**	**(93,848)**	**(86,946)**	**(79,871)**	**(70,598)**
101,243	**Investment Income**	**80,007**	**88,234**	**95,266**	**102,345**	**104,101**
88	**Gain(Loss) on sale of property**					
18,634	**Net Income (Loss) from Operations**	**(4,699)**	**(5,614)**	**8,320**	**22,474**	**33,503**
	Transfer from IT Optimization Fund	**-**	**-**	**-**	**-**	**-**
-	Transfer from Immobilizer Incentive Fund	-	-	-	-	-
18,634	**Net Income (Loss) for Rate Setting**	**(4,699)**	**(5,614)**	**8,320**	**22,474**	**33,503**

Manitoba Public Insurance

Exhibit 1b Base Forecast
STATEMENT OF BASIC INSURANCE RETAINED EARNINGS

		Actual	Projection				
		2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
BASIC							
Rate Stabilization Reserve (RSR):							
Beginning Balance		$ 140,525	$ 155,700	$ 153,300	$ 162,000	$ 170,200	$ 178,200
Net Income (Loss) from annual operations							
Transfer from Basic Retained Earnings		15,175	-	8,700	8,200	8,000	8,400
Transfer to Basic Retained Earnings		-	(2,400)	-	-	-	-
Transfer from Immobilizer Incentive Fund							
Appropriation of RSR - Immobilizer Incentive Fund		-	-	-	-	-	-
Transfer from SRE		-	-	-	-	-	-
Transfer from Extension			-	-	-	-	-
Prior Period Adjustment							
Premium Rebate - Recovery							
Premium Rebate		-	-	-	-	-	-
IFRS Opening Adjustment							
IFRS In-Year Adjustment							
Basic Insurance Rate Stabilization Reserve Balance - End of Year		155,700	153,300	162,000	170,200	178,200	186,600
PUB RSR Target Range	Min	$ 79,000	$ 76,700	$ 81,100	$ 85,200	$ 89,200	$ 93,400
	Max	$ 158,000	$ 153,300	$ 162,000	$ 170,200	$ 178,200	$ 186,600
MPI RSR Target		$ 200,000					
Retained Earnings							
Beginning Balance		-	54,339	52,040	37,726	37,846	52,320
Net Income (Loss) from annual operations		18,634	(4,699)	(5,614)	8,320	22,474	33,503
Transfer to Rate Stabilization Reserve		(15,175)	-	(8,700)	(8,200)	(8,000)	(8,400)
Transfer from Rate Stabilization Reserve		-	2,400	-	-	-	-
Transfer from Immobilizer Incentive Fund							
Transfer (to) from IT Optimization Fund		65,000					
Premium Rebate		(14,120)					
Transition to IFRS Mar 1/10							
Balance of Fund		54,339	52,040	37,726	37,846	52,320	77,423
Total Basic Retained Earnings		**$ 210,039**	**$ 205,340**	**$ 199,726**	**$ 208,046**	**$ 230,520**	**$ 264,023**

Exhibit 2a Decline in Equity Markets Scenario
STATEMENT OF OPERATIONS

BASIC

Actual 2011/12	($ in thousands)	Forecast 2012/13	Outlook 2013/14	2014/15	2015/16	2016/17
-4.00%		-8.00%	0.00%	0.00%	0.00%	0.00%
$		$	$	$	$	$
	Net Premiums Written					
760,039	Motor Vehicles	729,600	761,582	794,869	828,408	864,072
26,593	Drivers	33,505	44,498	51,543	57,649	63,506
(6,679)	Reinsurance Ceded	(9,422)	(13,687)	(14,979)	(15,820)	(16,582)
779,953	**Total Net Premiums Written**	**753,683**	**792,393**	**831,433**	**870,237**	**910,996**
	Net Premiums Earned					
748,948	Motor Vehicles	743,698	746,870	779,557	812,980	847,667
24,037	Drivers	29,688	39,002	48,020	54,596	60,578
(11,308)	Reinsurance Ceded	(12,201)	(13,686)	(14,978)	(15,819)	(16,581)
761,677	**Total Net Premiums Earned**	**761,185**	**772,186**	**812,599**	**851,757**	**891,664**
18,736	Service Fees & Other Revenues	17,767	21,061	20,615	22,448	24,670
780,413	**Total Earned Revenues**	**778,952**	**793,247**	**833,214**	**874,205**	**916,334**
	Claims					
612,037	Net Claims Incurred	612,334	638,142	661,812	686,137	711,718
105,924	Claims Expense	112,622	114,681	119,070	124,652	126,797
15,038	Road Safety/Loss Prevention	14,833	13,779	13,465	13,253	13,405
732,999	**Total Claims Costs**	**739,789**	**766,602**	**794,347**	**824,042**	**851,920**
	Expenses					
62,879	Operating	61,880	63,166	65,894	67,412	69,629
41,033	Commissions	35,555	30,455	31,730	33,165	34,637
22,766	Premium Taxes	23,203	23,575	24,826	26,026	27,246
3,433	Regulatory/Appeal	3,231	3,297	3,363	3,431	3,500
130,111	**Total Expenses**	**123,869**	**120,493**	**125,813**	**130,034**	**135,012**
(82,697)	**Underwriting Income (Loss)**	**(84,706)**	**(93,848)**	**(86,946)**	**(79,871)**	**(70,598)**
101,243	**Investment Income**	**80,007**	**(35,909)**	**19,287**	**73,075**	**73,555**
88	**Gain(Loss) on sale of property**					
18,634	**Net Income (Loss) from Operations**	**(4,699)**	**(129,757)**	**(67,659)**	**(6,796)**	**2,957**
	Transfer from IT Optimization Fund	**-**	**-**	**-**	**-**	**-**
-	Transfer from Immobilizer Incentive Fund	-	-	-	-	-
18,634	**Net Income (Loss) for Rate Setting**	**(4,699)**	**(129,757)**	**(67,659)**	**(6,796)**	**2,957**

Exhibit 2b Decline in Equity Markets Scenario
STATEMENT OF BASIC INSURANCE RETAINED EARNINGS

	Actual	Projection				
	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
BASIC						
Rate Stabilization Reserve (RSR):						
Beginning Balance	$ 140,525	$ 155,700	$ 151,100	$ 75,583	$ 7,924	$ 1,128
Net Income (Loss) from annual operations						
Transfer from Basic Retained Earnings	15,175	-	(75,517)	(67,659)	(6,796)	2,957
Transfer to Basic Retained Earnings	-	(4,600)	-	-	-	-
Transfer from Immobilizer Incentive Fund						
Appropriation of RSR - Immobilizer Incentive Fund	-	-	-	-	-	-
Transfer from SRE	-	-	-	-	-	-
Transfer from Extension		-	-	-	-	-
Prior Period Adjustment						
Premium Rebate - Recovery						
Premium Rebate	-	-	-	-	-	-
IFRS Opening Adjustment						
IFRS In-Year Adjustment						
Basic Insurance Rate Stabilization Reserve Balance - End of Year	155,700	151,100	75,583	7,924	1,128	4,085
PUB RSR Target Ra Min	$ 79,000	$ 76,700	$ 81,100	$ 85,200	$ 89,200	$ 93,400
Max	$ 158,000	$ 153,300	$ 162,000	$ 170,200	$ 178,200	$ 186,600
MPI RSR Target	$ 200,000					
Retained Earnings						
Beginning Balance	-	54,339	54,240	-	-	-
Net Income (Loss) from annual operations	18,634	(4,699)	(129,757)	(67,659)	(6,796)	2,957
Transfer to Rate Stabilization Reserve	(15,175)	-	75,517	67,659	6,796	(2,957)
Transfer from Rate Stabilization Reserve	-	4,600	-	-	-	-
Transfer from Immobilizer Incentive Fund						
Transfer (to) from IT Optimization Fund	65,000					
Premium Rebate	(14,120)					
Transition to IFRS Mar 1/10						
Balance of Fund	54,339	54,240	-	-	-	-
Total Basic Retained Earnings	**$ 210,039**	**$ 205,340**	**$ 75,583**	**$ 7,924**	**$ 1,128**	**$ 4,085**

Exhibit 3a Combined Scenario
STATEMENT OF OPERATIONS

BASIC

-4.00%		-8.00%	0.00%	0.00%	0.00%	0.00%
Actual		Forecast	Outlook			
2011/12	($ in thousands)	2012/13	2013/14	2014/15	2015/16	2016/17
$		$	$	$	$	$
	Net Premiums Written					
760,039	Motor Vehicles	729,600	761,582	794,869	828,408	864,072
26,593	Drivers	33,505	44,498	51,543	57,649	63,506
(6,679)	Reinsurance Ceded	(9,422)	(13,687)	(14,979)	(15,820)	(16,582)
779,953	**Total Net Premiums Written**	**753,683**	**792,393**	**831,433**	**870,237**	**910,996**
	Net Premiums Earned					
748,948	Motor Vehicles	743,698	746,870	779,557	812,980	847,667
24,037	Drivers	29,688	39,002	48,020	54,596	60,578
(11,308)	Reinsurance Ceded	(12,201)	(13,686)	(14,978)	(15,819)	(16,581)
761,677	**Total Net Premiums Earned**	**761,185**	**772,186**	**812,599**	**851,757**	**891,664**
18,736	Service Fees & Other Revenues	17,767	21,061	20,615	22,448	24,670
780,413	**Total Earned Revenues**	**778,952**	**793,247**	**833,214**	**874,205**	**916,334**
	Claims					
612,037	Net Claims Incurred	612,334	697,897	657,966	685,183	711,842
105,924	Claims Expense	112,622	114,575	119,282	124,763	126,822
15,038	Road Safety/Loss Prevention	14,833	13,786	13,501	13,271	13,409
732,999	**Total Claims Costs**	**739,789**	**826,258**	**790,749**	**823,217**	**852,073**
	Expenses					
62,879	Operating	61,880	63,166	65,894	67,412	69,629
41,033	Commissions	35,555	30,455	31,730	33,165	34,637
22,766	Premium Taxes	23,203	23,575	24,826	26,026	27,246
3,433	Regulatory/Appeal	3,231	3,297	3,363	3,431	3,500
130,111	**Total Expenses**	**123,869**	**120,493**	**125,813**	**130,034**	**135,012**
(82,697)	**Underwriting Income (Loss)**	**(84,706)**	**(153,504)**	**(83,348)**	**(79,046)**	**(70,751)**
101,243	**Investment Income**	**80,007**	**(10,925)**	**55,527**	**99,084**	**101,768**
88	**Gain(Loss) on sale of property**					
18,634	**Net Income (Loss) from Operations**	**(4,699)**	**(164,429)**	**(27,821)**	**20,038**	**31,017**
	Transfer from IT Optimization Fund	**-**	**-**	**-**	**-**	**-**
-	Transfer from Immobilizer Incentive Fund	-	-	-	-	-
18,634	**Net Income (Loss) for Rate Setting**	**(4,699)**	**(164,429)**	**(27,821)**	**20,038**	**31,017**

Manitoba Public Insurance

Exhibit 3b Combined Scenario
STATEMENT OF BASIC INSURANCE RETAINED EARNINGS

	Actual	Projection				
	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
BASIC						
Rate Stabilization Reserve (RSR):						
Beginning Balance	$ 140,525	$ 155,700	$ 151,100	$ 40,911	$ 13,090	$ 33,128
Net Income (Loss) from annual operations						
Transfer from Basic Retained Earnings	15,175	-	(110,189)	(27,821)	20,038	31,017
Transfer to Basic Retained Earnings	-	(4,600)	-	-	-	-
Transfer from Immobilizer Incentive Fund						
Appropriation of RSR - Immobilizer Incentive Fund	-	-	-	-	-	-
Transfer from SRE	-	-	-	-	-	-
Transfer from Extension		-	-	-	-	-
Prior Period Adjustment						
Premium Rebate - Recovery						
Premium Rebate	-	-	-	-	-	-
IFRS Opening Adjustment						
IFRS In-Year Adjustment						
Basic Insurance Rate Stabilization Reserve Balance - End of Year	155,700	151,100	40,911	13,090	33,128	64,145
PUB RSR Target Rar Min	$ 79,000	$ 76,700	$ 81,100	$ 85,200	$ 89,200	$ 93,400
Max	$ 158,000	$ 153,300	$ 162,000	$ 170,200	$ 178,200	$ 186,600
MPI RSR Target	$ 200,000					
Retained Earnings						
Beginning Balance	-	54,339	54,240	-	-	-
Net Income (Loss) from annual operations	18,634	(4,699)	(164,429)	(27,821)	20,038	31,017
Transfer to Rate Stabilization Reserve	(15,175)	-	110,189	27,821	(20,038)	(31,017)
Transfer from Rate Stabilization Reserve	-	4,600	-	-	-	-
Transfer from Immobilizer Incentive Fund						
Transfer (to) from IT Optimization Fund	65,000					
Premium Rebate	(14,120)					
Transition to IFRS Mar 1/10						
Balance of Fund	54,339	54,240	-	-	-	-
Total Basic Retained Earnings	**$ 210,039**	**$ 205,340**	**$ 40,911**	**$ 13,090**	**$ 33,128**	**$ 64,145**

Exhibit 4a Loss Ratio Scenario
STATEMENT OF OPERATIONS

BASIC

-4.00%		-8.00%	0.00%	0.00%	0.00%	0.00%
Actual		Forecast	Outlook			
2011/12	($ in thousands)	2012/13	2013/14	2014/15	2015/16	2016/17
$		$	$	$	$	$
	Net Premiums Written					
760,039	Motor Vehicles	729,600	761,582	794,869	828,408	864,072
26,593	Drivers	33,505	44,498	51,543	57,649	63,506
(6,679)	Reinsurance Ceded	(9,422)	(18,687)	(14,979)	(15,820)	(16,582)
779,953	**Total Net Premiums Written**	**753,683**	**787,393**	**831,433**	**870,237**	**910,996**
	Net Premiums Earned					
748,948	Motor Vehicles	743,698	746,870	779,557	812,980	847,667
24,037	Drivers	29,688	39,002	48,020	54,596	60,578
(11,308)	Reinsurance Ceded	(12,201)	(18,686)	(14,978)	(15,819)	(16,581)
761,677	**Total Net Premiums Earned**	**761,185**	**767,186**	**812,599**	**851,757**	**891,664**
18,736	Service Fees & Other Revenues	17,767	21,061	20,615	22,448	24,670
780,413	**Total Earned Revenues**	**778,952**	**788,247**	**833,214**	**874,205**	**916,334**
	Claims					
612,037	Net Claims Incurred	612,334	717,733	658,353	685,149	711,823
105,924	Claims Expense	112,622	116,001	119,295	124,780	126,828
15,038	Road Safety/Loss Prevention	14,833	13,878	13,503	13,274	13,410
732,999	**Total Claims Costs**	**739,789**	**847,612**	**791,151**	**823,203**	**852,061**
	Expenses					
62,879	Operating	61,880	63,217	65,894	67,412	69,629
41,033	Commissions	35,555	30,455	31,730	33,165	34,637
22,766	Premium Taxes	23,203	23,575	24,826	26,026	27,246
3,433	Regulatory/Appeal	3,231	3,297	3,363	3,431	3,500
130,111	**Total Expenses**	**123,869**	**120,544**	**125,813**	**130,034**	**135,012**
(82,697)	**Underwriting Income (Loss)**	**(84,706)**	**(179,909)**	**(83,750)**	**(79,032)**	**(70,739)**
101,243	**Investment Income**	**80,007**	**88,234**	**95,266**	**102,345**	**104,101**
88	**Gain(Loss) on sale of property**					
18,634	**Net Income (Loss) from Operations**	**(4,699)**	**(91,675)**	**11,516**	**23,313**	**33,362**
	Transfer from IT Optimization Fund	-	-	-	-	-
-	Transfer from Immobilizer Incentive Fund	-	-	-	-	-
18,634	**Net Income (Loss) for Rate Setting**	**(4,699)**	**(91,675)**	**11,516**	**23,313**	**33,362**

Exhibit 4b Loss Ratio Scenario
STATEMENT OF BASIC INSURANCE RETAINED EARNINGS

	Actual	Projection				
	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
BASIC						
Rate Stabilization Reserve (RSR):						
Beginning Balance	$ 140,525	$ 155,700	$ 153,300	$ 113,665	$ 125,181	$ 148,494
Net Income (Loss) from annual operations						
Transfer from Basic Retained Earnings	15,175	-	(39,635)	11,516	23,313	33,362
Transfer to Basic Retained Earnings	-	(2,400)	-	-	-	-
Transfer from Immobilizer Incentive Fund						
Appropriation of RSR - Immobilizer Incentive Fund	-	-	-	-	-	-
Transfer from SRE	-	-	-	-	-	-
Transfer from Extension		-	-	-	-	-
Prior Period Adjustment						
Premium Rebate - Recovery						
Premium Rebate	-	-	-	-	-	-
IFRS Opening Adjustment						
IFRS In-Year Adjustment						
Basic Insurance Rate Stabilization Reserve Balance - End of Year	155,700	153,300	113,665	125,181	148,494	181,856
PUB RSR Target Range	$ 79,000	$ 76,700	$ 81,100	$ 85,200	$ 89,200	$ 93,400
	$ 158,000	$ 153,300	$ 162,000	$ 170,200	$ 178,200	$ 186,600
MPI RSR Target	$ 200,000					
Retained Earnings						
Beginning Balance	-	54,339	52,040	-	-	-
Net Income (Loss) from annual operations	18,634	(4,699)	(91,675)	11,516	23,313	33,362
Transfer to Rate Stabilization Reserve	(15,175)	-	39,635	(11,516)	(23,313)	(33,362)
Transfer from Rate Stabilization Reserve	-	2,400	-	-	-	-
Transfer from Immobilizer Incentive Fund						
Transfer (to) from IT Optimization Fund	65,000					
Premium Rebate	(14,120)					
Transition to IFRS Mar 1/10						
Balance of Fund	54,339	52,040	-	-	-	-
Total Basic Retained Earnings	**$ 210,039**	**$ 205,340**	**$ 113,665**	**$ 125,181**	**$ 148,494**	**$ 181,856**

Exhibit 5a Large Hail Storm Scenario
STATEMENT OF OPERATIONS

BASIC

-4.00%		-8.00%	0.00%	0.00%	0.00%	0.00%
Actual		Forecast	Outlook			
2011/12	($ in thousands)	2012/13	2013/14	2014/15	2015/16	2016/17
$		$	$	$	$	$
	Net Premiums Written					
760,039	Motor Vehicles	729,600	761,582	794,869	828,408	864,072
26,593	Drivers	33,505	44,498	51,543	57,649	63,506
(6,679)	Reinsurance Ceded	(6,657)	(25,687)	(20,071)	(21,197)	(22,219)
779,953	**Total Net Premiums Written**	**756,448**	**780,393**	**826,341**	**864,860**	**905,359**
	Net Premiums Earned					
748,948	Motor Vehicles	743,698	746,870	779,557	812,980	847,667
24,037	Drivers	29,688	39,002	48,020	54,596	60,578
(11,308)	Reinsurance Ceded	(12,201)	(25,687)	(20,071)	(21,197)	(22,219)
761,677	**Total Net Premiums Earned**	**761,185**	**760,185**	**807,506**	**846,379**	**886,026**
18,736	Service Fees & Other Revenues	17,767	21,061	20,615	22,448	24,670
780,413	**Total Earned Revenues**	**778,952**	**781,246**	**828,121**	**868,827**	**910,696**
	Claims					
612,037	Net Claims Incurred	612,334	693,948	659,787	685,638	711,639
105,924	Claims Expense	112,622	123,010	119,596	124,780	126,817
15,038	Road Safety/Loss Prevention	14,833	14,259	13,503	13,262	13,406
732,999	**Total Claims Costs**	**739,789**	**831,217**	**792,886**	**823,680**	**851,862**
	Expenses					
62,879	Operating	61,880	64,606	65,894	67,412	69,629
41,033	Commissions	35,555	30,455	31,730	33,165	34,637
22,766	Premium Taxes	23,203	23,575	24,826	26,026	27,246
3,433	Regulatory/Appeal	3,231	3,297	3,363	3,431	3,500
130,111	**Total Expenses**	**123,869**	**121,933**	**125,813**	**130,034**	**135,012**
(82,697)	**Underwriting Income (Loss)**	**(84,706)**	**(171,904)**	**(90,578)**	**(84,887)**	**(76,178)**
101,243	**Investment Income**	**80,007**	**88,234**	**95,266**	**102,345**	**104,101**
88	**Gain(Loss) on sale of property**					
18,634	**Net Income (Loss) from Operations**	**(4,699)**	**(83,670)**	**4,688**	**17,458**	**27,923**
	Transfer from IT Optimization Fund	**-**	**-**	**-**	**-**	**-**
-	Transfer from Immobilizer Incentive Fund	-	-	-	-	-
18,634	**Net Income (Loss) for Rate Setting**	**(4,699)**	**(83,670)**	**4,688**	**17,458**	**27,923**

Exhibit 5b Loss Ratio Scenario
STATEMENT OF BASIC INSURANCE RETAINED EARNINGS

	Actual	Projection				
	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
BASIC						
Rate Stabilization Reserve (RSR):						
Beginning Balance	$ 140,525	$ 155,700	$ 153,300	$ 121,670	$ 126,358	$ 143,816
Net Income (Loss) from annual operations						
Transfer from Basic Retained Earnings	15,175	-	(31,630)	4,688	17,458	27,923
Transfer to Basic Retained Earnings	-	(2,400)	-	-	-	-
Transfer from Immobilizer Incentive Fund						
Appropriation of RSR - Immobilizer Incentive Fund	-	-	-	-	-	-
Transfer from SRE	-	-	-	-	-	-
Transfer from Extension		-	-	-	-	-
Prior Period Adjustment						
Premium Rebate - Recovery						
Premium Rebate	-	-	-	-	-	-
IFRS Opening Adjustment						
IFRS In-Year Adjustment						
Basic Insurance Rate Stabilization Reserve Balance - End of Year	155,700	153,300	121,670	126,358	143,816	171,739
PUB RSR Target Range Min	$ 79,000	$ 76,700	$ 81,100	$ 85,200	$ 89,200	$ 93,400
Max	$ 158,000	$ 153,300	$ 162,000	$ 170,200	$ 178,200	$ 186,600
MPI RSR Target	$ 200,000					
Retained Earnings						
Beginning Balance	-	54,339	52,040	-	-	-
Net Income (Loss) from annual operations	18,634	(4,699)	(83,670)	4,688	17,458	27,923
Transfer to Rate Stabilization Reserve	(15,175)	-	31,630	(4,688)	(17,458)	(27,923)
Transfer from Rate Stabilization Reserve	-	2,400	-	-	-	-
Transfer from Immobilizer Incentive Fund						
Transfer (to) from IT Optimization Fund	65,000					
Premium Rebate	(14,120)					
Transition to IFRS Mar 1/10						
Balance of Fund	54,339	52,040	-	-	-	-
Total Basic Retained Earnings	**$ 210,039**	**$ 205,340**	**$ 121,670**	**$ 126,358**	**$ 143,816**	**$ 171,739**