

MANITOBA PUBLIC INSURANCE

TESTIMONY OF LUKE JOHNSTON

CHIEF ACTUARY & DIRECTOR OF PRICING & ECONOMICS

Good morning, Mr. Chairman, members of the Board, ladies and gentlemen.

My name is Luke Johnston. I am Chief Actuary and Director of Pricing and Economics for the Manitoba Public Insurance Corporation.

I am a Fellow of the Casualty Actuarial Society and a Fellow of the Canadian Institute of Actuaries.

I have worked for Manitoba Public Insurance since 2002 and have been in my current position since December 2011. Prior to that time, I served as Manager of Actuarial Services. This is my first appearance before the Board for a General Rate Application (GRA). I attended all Manitoba Public Insurance Rate Hearings from 2005 to 2011, the Special Hearing on Loss Transfer held in May of 2005 and the Special Hearing on Driver Safety Rating (DSR) held in April of 2009 in a back-row support capacity.

As Chief Actuary, I have responsibility for the Corporation's rate setting process and the claims and revenue forecasts underlying the rates. I am also responsible for all other actuarial functions, which include the quarterly review of policy liabilities, Dynamic Capital Adequacy Testing (DCAT) and reserving guidelines. The Corporation's external Appointed Actuary, Mr. Joe S. Cheng FCIA of J.S. Cheng & Partners Inc, provides an independent opinion on policy liabilities in the October and February Appointed Actuary's reports.

I will first discuss the results of the October 31, 2011 and February 29, 2012 Appointed Actuary's reports. Second, I will summarize the key changes from the claims and revenue forecasts. Third, I will provide a summary of the rate changes

proposed for 2013/14. Finally, I will discuss the issues surrounding the Rate Stabilization Reserve (RSR).

As shown in AI.10 Part 1, the October 31, 2011 Appointed Actuary's report resulted in a reduction in claim liabilities of \$43.1 million, or 3.2% of total claim liabilities, relative to the Corporation's booked value. The main reason for the reduction was due to the removal of an assumed tail 'load' for Weekly Indemnity coverage (i.e. assumed additional growth in claims incurred for lifetime injury claimants beyond the Corporation's observed experience).

A 2005 study of claimant termination rates indicated unfavourable loss development on the lifetime injury claims. As a result, a 6% load was added to the tail development on both Weekly Indemnity and Accident Benefits Other – Indexed coverages. In 2011, the Corporation performed an updated analysis and found that the results of the 2005 study were no longer applicable. As a result, the Corporation has removed the 6% load from Weekly Indemnity, which results in a decrease in claim liabilities of approximately \$3.1 million per accident year. However, because this change impacts all 18 years of PIPP experience, the total reduction is \$55.0 million. As the number of PIPP year's increases, changes in assumptions for lifetime claimants have become increasingly leveraged. Also, the impact from these types of changes flow through the current year net claims incurred, even though the changes are related to previous accident years.

Another significant change in the October Appointed Actuary's report was to increase the Corporation's interest rate provision for adverse deviation from 1.00% to 1.25%. As of October 31, 2011, the Manitoba inflation rate was 3.02% and the average yield on the Corporation's bond portfolio (net of investment management fees) was 3.69%. Therefore, the calculated real return as of October 31, 2011 was only 0.67%. Prior to the 2011/12 year, the real return had never been below 2.00% at the time of an actuarial valuation (e.g. the real return had a low of 2.01% in February 2011 and a high of 4.02% in October 2009). Due to the higher uncertainty in the real interest rate, the Corporation increased the interest rate provision by 0.25%. The impact was an increase in unpaid claim liabilities of \$34.0 million.

The impact of all other changes in assumptions from the October 2011 Appointed Actuary's report was a \$21 million decrease in liabilities relative to booked values. The majority of this impact was due to updating the loss development assumptions to be reflective of the latest experience. There were no changes to assumptions in the February 2012 Appointed Actuary's report other than to update the report for the latest observed data. The February report indicated a decrease in unpaid claim liabilities of approximately \$1 million.

Turning now to forecasting, the net claims incurred forecast has remained very stable over the past year with an average increase of approximately 0.75% over the rating period. The stability of the claims forecast is the key reason for the overall 0% rate indication in 2013. The favourable changes to the claims forecast include:

- A reduction in the Weekly Indemnity forecast by \$3.6 million per year as a result of the removal of the 6% tail load in the Appointed Actuary's report.
- A reduction in the forecast of theft related perils by \$3.1 million per year due to continued favourable claims experience. As shown in TI.17, incurred losses from total and attempted theft decreased by 25% in 2011/12 and by 71% since 2007/08.

The unfavourable changes to the claims forecast include:

- An increase in the hail forecast of \$3.6 million per year as a result of increasingly poor net (of reinsurance) hail experience. The Corporation's three year average net hail losses have increased steadily from \$3.9 million in 2005/06 to \$22.0 million in 2011/12.
- An increase in the present value of unpaid claim liabilities of approximately \$5.5 million per year due to the decline in the discount rate from 4.10% to 3.55%.
- An increase in the interest rate provision for adverse deviation from 1.00% to 1.25% with an approximate impact of \$2.5 million per year.

Details of the claims forecast are discussed in SM.2 and TI.17 of this application.

As discussed in SM.3 and TI.18, there were some significant changes to this year's revenue forecast.

The actual 2011/12 written vehicle premiums were significantly higher (\$18.3 million, or 2.47%, higher) than expected in last year's forecast. There were two key reasons for this:

1. Higher than expected upgrade from Driver Safety Rating: The overall upgrade factor from the rate model was approximately 4.00% compared to a forecast of 2.25%. The main reason for the difference was from changes in the average vehicle premium discount. Compared to the Corporation's forecasts: (i) more drivers moved down the DSR scale from at-fault accidents and convictions and (ii) more drivers insured their vehicles with low or zero vehicle discount. The additional DSR upgrade accounts for approximately \$12 million of the above difference.
2. Higher than expected volume growth. The 2011/12 volume growth was 3.27%, which is the second highest growth rate on record, compared to a forecast of 2.50%. The additional growth accounts for approximately \$6 million of the above difference.

For the forecast period, the Corporation has revised its forecasting methodology for volume and upgrade. The projected volume and upgrade factors will now be based on Highway Traffic Act (HTA) units and upgrade rather than overall volume and upgrade. Non-HTA units, which are made up of trailers and ORVs, represent 21% of units but only 1% of vehicle premiums. The increasing number of non-HTA units was distorting the Corporation's upgrade and volume calculations. This year's forecast assumes that the combined growth from volume and upgrade (excluding DSR) is 4.29% per year (2.50% HTA upgrade, 1.75% HTA volume) compared to 4.81% per year (2.25% upgrade, 2.50% volume) last year. This change translates into approximately \$8 million less revenue in 2013/14 and \$14 million less revenue in 2014/15 compared to using last year's assumptions.

Another significant change to this year's revenue forecast relates to Driver Premium. The 2011/12 year was the Corporation's first opportunity to observe the movement of drivers under the Driver Safety Rating (DSR) system. As discussed above, drivers recorded more infractions than expected in last year's forecast. There was also a large (3%) increase in the number of earned drivers in 2011/12. The increase in driver units is believed to be due to a combination of (i) new drivers, (ii) the tendency of drivers to keep their license active under DSR in order to receive merit points, and (iii) a reduction in late renewals due to the Streamlined Renewal process. The actual and projected increase in infractions and unit counts lead to an increase in the driver premium forecast of approximately \$9 million per year over the forecast period.

Turning to investment income, the Corporation has proposed a change to the methodology used to forecast equity returns. In last year's forecast, equity returns were forecasted at 6.1% per year based on the average yield of Government of Canada 10 year bonds plus an equity risk premium of 1.50%. As of February 29, 2012, this methodology produced an equity return forecast of only 4.8% per year. The Corporation believes that such a forecast is inappropriate given that the average annual return on the Toronto Stock Exchange (TSX) over any rolling 20-year (i.e. long term) period has never been below 5.2%. As a result, the Corporation has proposed adding a 'minimum equity return' of 6.1% per year to the current methodology. The proposed minimum is based on the 5th percentile of annual returns on the TSX over all rolling 20 year periods. An annual equity return assumption of 6.1%, instead of 4.8%, results in additional investment income of approximately \$6 million per year.

Moving now to rate making, as discussed in SM.1 and SM.4, the results of the claims, revenue and expense forecasts are used to create the pro forma financial statements. The pro formas indicate that an approximately 0.2% rate decrease is required in 2013/14 to produce break even net income over the rating period. The Corporation is applying for an overall rate change of 0% based on these results.

The Corporation's rating approach is based on actuarial principles, which ties rates directly to claims costs. In other words, the ratemaking process is actuarially sound and statistically driven. The Corporation also follows normal industry practice in classification ratemaking. The classification plan consists of rating territories, insurance uses, rate groups and driving record and is set in regulation. A full description of the classification plan is provided, for information, at AI. 5.

The proposed rate changes for each major class are shown in the following table. A 15% increase/decrease cap is applied to experience based indicators, while final rates are capped at a 20% increase/decrease (per PUB Order 148/04), with the exceptions of mopeds and small engine displacement motorscooters, which are capped at a 25% increase (per PUB Order 156/06). The proposed rates are shown in AP.1.

MAJOR CLASS	EXPERIENCE RATE CHANGE
Private Passenger	0.0%
Commercial	-5.0%
Public	3.3%
Motorcycles	-0.2%
Trailers	6.3%
Off Road Vehicles	14.3%
Overall	0.0%

The proposed rate changes by territory are shown in the following table.

TERRITORY	EXPERIENCE RATE CHANGE
1	0.16%
2	0.25%
3	-5.68%
4	-7.20%
5	1.66%

The above rate changes are driven by changes in claims experience. In terms of the larger increases or decreases (+/- 5%), Commercial vehicles received a rate decrease due to an improvement in their serious loss experience. Trailers received a rate increase due to an increase in hail losses. ORV's received a rate increase due to

poor loss experience in the past year. Territory 3 and 4 received rate decreases due to a significant reduction in their serious loss experience over the past several years.

Section TI.3 provides details of the increases and decreases, by dollar ranges and percent ranges, proposed for 2013/14 as well as those approved in 2012/13. As indicated in TI.3, 430,531 (42.3%) of vehicles receive a rate decrease, 23,154 (2.3%) of vehicles remain unchanged and 565,522 (55.5%) of vehicles receive increases. 60.5% of vehicles receive a rate change of \$20 or less.

The Corporation is also proposing that driver premiums for Driver Safety Rating (DSR) demerit levels 1 to 20 will increase to a maximum of \$2,500 for 2013/14. This change is the third year of the three year phased in increases to driver premiums for the DSR demerit levels, which was originally presented to the Public Utilities Board in April 2009. The proposed DSR driver premiums for 2013/14 are shown in AP.1.

Moving now to the Rate Stabilization Reserve (RSR), in AI.11 the Corporation has filed an update to the Dynamic Capital Adequacy Test (DCAT), the Minimum Capital Test (MCT), the Operational and Investment Risk Analysis (RA/VaR) and the 'Kopstein' Percentage of Premium method, along with the pros and cons for each of these methods for determining the RSR requirement. The Corporation has also included a 'Discussion of the Rate Stabilization Reserve' in AI.11, in which a strong case is made for the Board to use the DCAT to set the RSR target. The Corporation recommends the DCAT because it (i) explicitly measures the potential financial impact from the Corporation's key risk factors and (ii) produces a RSR target that is directly related to the Corporation's risk level and directly responsive to the purpose of the RSR. The indicated 2012/13 RSR target based on the DCAT method is \$190 million.

The written material referred to in this testimony was prepared under my direction and control and it is accurate to the best of my knowledge and belief.

That concludes my direct testimony.