

Volume:		Page No.:	
Topic:	Forecasting		
Sub Topic:			
Issue:			

Question:

Please update last years CMMG (MPI) 1-1 to show comparison of projected vs. actual loss 2004 to 2016

Rationale for Question:

Reviewing accuracy of forecast.

RESPONSE:

Please refer to the table below.

Comparison of Projected vs Actual for Motorcycle Major Class

_	Projected L	osses [a]	_	Actual L	osses	_	Actual Lo	ss Ratio
Loss Ins Year	Excluding "Pool" Loss	Including "Pool" Loss	Projected Total Premium [b]	Excluding "Pool" Loss [c]	Including "Pool" Loss [d]	Actual Total Premium [e]	Excluding "Pool" Loss	Including "Pool" Loss
2004	7,946,004	7,946,004	6,175,800	4,428,259	4,755,507	6,597,819	67.12%	72.08%
2005	11,559,434	11,559,434	8,478,000	6,235,231	6,696,015	7,464,128	83.54%	89.71%
2006	9,893,169	9,893,169	8,472,800	12,578,122	13,507,645	8,618,553	145.94%	156.73%
2007	10,390,631	10,952,927	9,343,600	7,834,815	8,413,807	9,474,661	82.69%	88.80%
2008	12,106,150	12,761,721	10,994,400	8,310,486	8,924,631	10,686,013	77.77%	83.52%
2009	12,050,545	12,775,440	12,238,200	7,336,921	7,879,119	11,474,147	63.94%	68.67%
2010	12,072,057	12,825,747	13,576,300	13,516,177	14,515,022	12,156,455	111.19%	119.40%
2011	12,245,914	13,018,014	13,131,800	5,945,262	6,384,617	12,817,434	46.38%	49.81%
2012	9,347,361	10,054,858	11,687,400	5,352,214	5,747,743	12,986,962	41.21%	44.26%
2013	9,991,774	10,729,886	12,523,900	11,966,370	12,850,684	12,851,434	93.11%	99.99%
2014	9,209,789	9,859,082	12,594,800	6,953,099	7,466,933	12,845,431	54.13%	58.13%
2015	9,031,739	9,734,074	12,210,000	8,171,822	8,775,720	12,810,342	63.79%	68.50%
2016	8,226,228	8,815,160	11,673,200					
2017	8,623,214	9,260,881	12,052,800					
TOTAL	142,694,009	150,186,397	155,153,000	98,628,778	105,917,445	130,783,378	75.41%	80.99%

Notes:

[&]quot;Pool" Loss as defined in Volume II, RM.4, pages 27 & 28

[[]a] From the respective GRA; Balanced Pure Premium * Projected Units;

[[]b] From the respective GRA; PUB Approved Major Class Rate * Projected Units; 2017 based on Applied for Major Class Rate * Projected Units

[[]c] Volume II, Ratemaking, Exhibit VI; Pure Premium No Trend * Number of Units; Sum over all coverages

[[]d] Actual Losses Excluding "Pool" Loss * 1.0739; 1.0739 = 9,260,881 / 8,623,214

[[]e] Earned premium from the Corporation's Data Warehouse; does not account for premium rebates

Volume:		Page No.:	
Topic:	Loss Data		
Sub Topic:			
Issue:			

Question:

Please update last years CMMG (MPI) 1-2, reviewing the loss distribution data.

Rationale for Question:

Reviewing loss distribution for anomalies and trends.

RESPONSE:

Please refer to attachment.



By Insurance Year

All Physical Damage and Injuries, All Heads of Coverage

Collision - Incurred

	2015		2014		2013		2012		2011	
Ranges	Claim Count	Incurred Amount								
< 0	1	(300)	2	(633)	1	(290)	3	(8,325)	3	(367)
0	47	-	27	-	34	-	32	-	26	-
0.01 to 25000	248	1,220,347	258	1,122,907	257	1,110,032	277	1,075,199	280	1,132,879
25001 to 50000	1	25,388			1	25,756				
50001 to 75000			1	50,385						
Grand Total	297	1,245,435	288	1,172,658	293	1,135,499	312	1,066,874	309	1,132,512

Collision - Paid

	20	<u>15 </u>	20	<u> 14 </u>	20	13	20	12	20	11
	Claim	Paid	Claim	Paid	Claim	Paid	Claim	Paid	Claim	Paid
Ranges	Count	Amount	Count	Amount	Count	Amount	Count	Amount	Count	Amount
< 0	1	(300)	2	(633)	1	(290)	3	(8,325)	3	(367)
0	57	-	28	-	34	-	32	-	26	-
0.01 to 25000	238	1,116,901	257	1,116,028	257	1,110,032	277	1,075,199	280	1,132,879
25001 to 50000	1	25,388			1	25,756				
50001 to 75000			1	50,385						
Grand Total	297	1,141,990	288	1,165,780	293	1,135,499	312	1,066,874	309	1,132,512



By Insurance Year

All Physical Damage and Injuries, All Heads of Coverage

Public Liability - Incurred

	201	2015		2014		2013		2012		2011	
	Claim	Incurred									
Ranges	Count	Amount									
0			1	-	1	-	_				
75001 to 100000									1	75,920	
Grand Total	•	-	1	-	1	-	-	-	1	75,920	

Public Liability - Paid

	201	5	2014	4	201	3	201	2	201	1
Ranges	Claim	Paid								
	Count	Amount								
0			1	-	1	-				
75001 to 100000									1	75,920
Grand Total	-	-	1	-	1	-	-	-	1	75,920



By Insurance Year

All Physical Damage and Injuries, All Heads of Coverage

Property Damage - Incurred

	2015		2014		2013		2012		2011	
Dongoo	Claim	Incurred								
Ranges	Count	Amount								
0	18	-	14	-	11	-	13	-	16	-
0.01 to 25000	38	50,139	24	19,427	37	54,615	34	29,107	29	25,026
Grand Total	56	50,139	38	19,427	48	54,615	47	29,107	45	25,026

Property Damage - Paid

-	201	5	201	4	20	13	20	012	2	011
Ranges	Claim Count	aid Amount	Claim Count	aid Amount	Claim Count	Paid Amount	Claim Count	Paid Amount	Claim Count	Paid Amount
0	21	-	14	-	12	-	13	-	16	-
0.01 to 25000	35	49,039	24	19,427	36	54,115	34	29,107	29	25,026
Grand Total	56	49,039	38	19,427	48	54,115	47	29,107	45	25,026



By Insurance Year

All Physical Damage and Injuries, All Heads of Coverage

Accident Benefits - Incurred

Addition Beliefits illication	20	15	201	4	20	13	2012		20	11
	Claim	Incurred								
Ranges	Count	Amount								
< 0									1	(96)
0	30	-	31	-	34	-	43	-	33	-
0.01 to 25000	113	919,090	102	760,300	79	614,167	92	706,065	94	639,951
25001 to 50000	20	648,427	13	445,403	19	673,959	23	799,261	21	722,337
50001 to 75000	11	668,101	13	822,334	8	479,853	6	337,105	12	701,178
75001 to 100000	6	557,250	8	721,786	4	362,640	2	170,379	4	365,936
100001 to 125000	6	665,446			6	660,246	3	344,834	2	206,472
125001 to 150000			4	515,813	2	283,911	1	125,690	3	405,704
150001 to 175000			2	315,209	2	324,248	3	485,219	1	160,586
175001 to 200000	1	183,974	2	366,979	4	754,464				
250001 to 275000			1	264,634	1	274,415			1	266,991
275001 to 300000							1	288,821	1	284,696
375001 to 400000	1	390,693			1	388,169				
450001 to 475000					1	465,986	1	473,076		
525001 to 550000									1	526,908
600001 to 625000							1	623,424		
750001 to 775000									1	761,425
3125001 to 3150000									1	3,148,486
425001 to 450000	1	444,690					1	442,273		
625001 to 650000							1	649,309		
225001 to 250000	1	247,056			3	699,899				
775001 to 800000					1	783,235				
1175001 to 1200000					1	1,194,163				
1725001 to 1750000					1	1,741,248				
Grand Total	190	4,724,727	176	4,212,458	167	9,700,602	178	5,445,457	176	8,190,574



By Insurance Year

All Physical Damage and Injuries, All Heads of Coverage

Accident Benefits - Paid

Accident Denents - Faid	20	15	201	14	20	13	20	12	20	11
Ranges	Claim Count	Paid Amount								
< 0	'								1	(96)
0	35	-	31	-	34	-	43	-	33	-
0.01 to 25000	127	606,101	108	549,451	81	628,476	92	702,861	94	640,734
25001 to 50000	16	602,301	15	509,370	20	701,755	24	828,512	21	722,337
50001 to 75000	7	423,955	10	629,501	7	440,885	5	285,817	13	753,845
75001 to 100000	2	169,206	5	407,526	5	434,066	2	171,256	4	362,721
100001 to 125000	1	116,756	4	454,062	4	471,090	3	325,708	1	104,256
125001 to 150000			3	399,126	8	1,076,730	3	391,922	5	681,780
150001 to 175000					1	153,997	3	485,219		
175001 to 200000					4	756,020				
225001 to 250000	1	245,478			1	241,784			1	236,274
250001 to 275000									1	274,401
275001 to 300000							1	288,516		
300001 to 325000	1	307,521								
350001 to 375000					1	373,919				
375001 to 400000					1	388,169	1	389,782		
600001 to 625000							1	623,424		
400001 to 425000									1	412,686
975001 to 1000000									1	986,476
Grand Total	190	2,471,318	176	2,949,036	167	5,666,890	178	4,493,018	176	5,175,414

Volume:		Page No.:	
Topic:	Rates		
Sub Topic:			
Issue:			

Question:

Please update last years CMMG (MPI) 1-3 for applied for versus rates approved.

Rationale for Question:

Reviewing loss rate vs. rates approved.

RESPONSE:

See the table below.

MOTORCYCLE MAJOR CLASS

Insurance Year	Rate Requirement*	Loss Ratio	% Increase Sought**	% Increase Approved
2004/05	\$1,012.96	72.08%	19.93%	14.82%
2005/06	\$1,183.33	89.71%	15.01%	13.86%
2006/07	\$1,115.92	156.73%	12.70%	5.00%
2007/08	\$1,167.24	88.80%	8.36%	5.00%
2008/09	\$1,181.44	83.52%	9.16%	9.16%
2009/10	\$1,150.94	68.67%	7.21%	7.21%
2010/11	\$1,147.15	119.40%	5.67%	5.67%
2011/12	\$1,130.47	49.81%	1.62%	-2.50%
2012/13	\$917.19	44.26%	-10.33%	-10.79%
2013/14	\$900.64	99.99%	-0.22%	-0.22%
2014/15	\$846.00	58.13%	-6.02%	-6.07%
2015/16	\$817.07	68.50%	-6.55%	-5.79%
2016/17	\$765.65		-7.63%	-7.63%
2017/18	\$752.77		-1.65%	

^{*} Credibility weighted required rate for the Motorcycle weighted class from RM 4.3 per respective GRA

^{**} Refer to RM 6 per respective GRA

Volume:	P	age No.:	
Topic:	Actuarial Rate Smoothing		
Sub Topic:			
Issue:			

Question:

Last years CMMG (MPI) 2-3 indicated that once data for 2006 was not included in the experience calculations, that the indicated rate decrease would increase by 4.5% (i.e. 12.7% - 8.2%). Why did we fail to obtain such a decrease in this year's application?

Rationale for Question:

Review of methodology.

RESPONSE:

The data for 2006/07 is still included in determining the required rate for motorcycles. Per <u>Volume II Ratemaking Page 31</u>, "For the Motorcycle major class, we used data for the 10 most recent years for Accident Benefits - Other and Income Replacement Indemnity to better smooth out the larger volatility in the data". The "10 most recent years" refer to years 2006/07 to 2015/16.

The required rate and required rate change for motorcycles continue to reflect the longer term average losses for the group. Per <u>Volume II Ratemaking Page 37</u>, recently improving loss experience has resulted in a required rate decrease of 2.1%, in spite of an overall required rate increase of 2.0%.



Volume:		Page No.:	
Topic:	Road Safety		
Sub Topic:			
Issue:			

Question:

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

Rationale for Question:

Assist in evaluating need for Road Safety Initiative for distracted drivers.

RESPONSE:

Manitoba Public Insurance is nearing completion of an internal costing study on distracted driving. The report is expected to be ready for release this fall and will include direct costing estimates related to distracted driving as a contributing factor in collisions.



Volume:	Page No.:
Topic:	Road Safety
Sub Topic:	
Issue:	

Question:

With reference to Loss Prevention Attachment LP-E filed in this year's Application, please explain why the Corporation didn't investigate, quantify and use the total societal cost in arriving at a conclusion on the cost and effectiveness of such barrier initiatives?

Rationale for Question:

Road Safety investment levels.

RESPONSE:

Historically, the Corporation has used only the direct insurance costs in the analysis of road safety programs because of the variability of social costs that exist outside of the Corporation's control.

In addition, with respect to wildlife collisions specifically, the use of social costs is most relevant when addressing the impacts of serious injuries and fatalities, the incidence of which are very low in wildlife collisions, resulting in marginal material difference to the analysis.

Volume:	Page No.:
Topic:	Road Safety
Sub Topic:	
Issue:	

Question:

Explain why a cost recovery of 8-12 years is not satisfactory, especially given the reduction of physical injury/pain and suffering, and the chance to avoid the loss of lives?

Rationale for Question:

Road Safety investment levels

RESPONSE:

A cost recovery period of 8 to 12 years represents an inferior investment, particularly given the likelihood that an increasing number of vehicles on the roadway will be equipped with automated vehicle technology including forward collision avoidance systems, night vision, and automatic emergency braking within the next decade, which will be a driver's best defense against wildlife collisions.

The Corporation is also mindful that a cost recovery period of 8 to 12 years on a physical structure may not provide a clear picture of actual costs, since it is likely that repairs or capital replacement will be required before the end of the payback period, reducing the overall financial benefit.

In addition, the 8 to 12 year cost recovery estimate does not include economic externalities and impacts on the natural environment that may result from the construction of fencing in this area. Manitoba Public Insurance must consider the potential for negative implications, including costs for residents of the area, the Bird's Hill Provincial Park, and the deer population. These externalities have not



been quantified in the analysis as they are currently unknown, but have the potential to emerge once a fence is constructed.

Volume:		Page No.:	
Topic:	Road Safety		
Sub Topic:			
Issue:			

Question:

Why has the Corporation not conducted a similar study for the portion of the Whiteshell that Highway #1 intersects?

Rationale for Question:

Review wildlife collision losses.

RESPONSE:

Highway 59 in the Birds Hill Park Provincial Park area has the highest density of wildlife and highest frequency of wildlife/vehicle collisions in Manitoba. If the study did not prove the fencing solution to be economic in this location, it is highly unlikely to prove economic elsewhere.

In addition, a cost benefit analysis conducted by Manitoba Public Insurance in 2012 for the Whiteshell corridor along Highway 1 concluded the payback period would be significantly longer than the 8 to 12 years identified in the 2016 analysis at Birds Hill.

Volume:		Page No.:	
Topic:	Road Safety		
Sub Topic:			
Issue:			

Question:

Does the Corporation agree it is possible to have average animal collision reduction rates in Manitoba approach the 86% to 95% levels reported at page 12 in the materials for the US & Quebec.

Rationale for Question:

Road safety planning.

RESPONSE:

Manitoba Public Insurance agrees that it is possible to achieve the 86-95 per cent reduction rate referenced in the literature at the geographic sites where fencing is installed. However, this potential effectiveness rate rapidly declines when the barrier is compromised by open or poorly secured entryways along the road. Adjoining or nearby roads at the fence ends or within the fence area may also result in a lower effectiveness rate depending on traffic levels. Outcomes are also dependent on the accuracy of positioning of the fence and crossing structure, which is, in turn subject to the accuracy and level of detail available for collision locations and/or animal crossing routes.

It is also important to consider that wildlife collisions occur randomly throughout Manitoba; therefore, it would not be reasonable to project an overall 86-95% reduction in collisions province-wide through the application of fencing along designated high-collision corridors.

Volume:		Page No.:	
Topic:	Rate Distribution		
Sub Topic:			
Issue:			

Question:

Please provide a table showing the amount of dollar increases for the 23% of motorcycle owners whose insurance is increasing in the application, breaking same into territory.

Rationale for Question:

Amount of increases sought from motorcyclists affordability concerns.

RESPONSE:

Please see the table below.

MOTORCYCLE MAJOR CLASS DOLLAR INCREASES BY TERRITORY

	NUMBER OF VEHICLES BY TERRITORY					VEHICLE
\$ RANGE	1	2	3	4	Commuter	TOTAL
\$1 to \$10	221	696	0	10	10	937
\$11 to \$20	889	226	7	0	1	1,123
\$21 to \$30	201	201	3	0	1	406
\$31 to \$40	229	99	21	0	60	409
\$41 to \$50	61	8	4	0	29	102
\$51 to \$60	22	1	3	0	11	37
\$61 to \$70	8	28	0	0	1	37
\$71 to \$80	10	96	0	0	0	106
\$81 to \$90	0	199	0	0	0	199
\$91 to \$100	0	118	0	0	0	118
\$101 to \$110	0	25	0	0	0	25
\$111 to \$120	0	23	0	0	0	23
\$121 to \$130	0	23	0	0	0	23
\$131 to \$140	0	13	0	0	0	13
\$141 to \$150	0	11	0	0	0	11
\$151 to \$160	0	2	0	0	0	2
\$161 to \$170	0	2	0	0	0	2
\$171 to \$180	0	5	0	0	0	5
\$181 to \$190	0	1	0	0	0	1
\$191 to \$200	0	1	0	0	0	1
\$201 to \$210	0	0	0	0	0	0
\$211 to \$220	0	0	0	0	0	0
\$221 to \$230	1	0	0	0	0	1
\$231 to \$240	1	0	0	0	0	1
\$241 to \$250	1	0	0	0	0	1
\$251 to \$260	0	0	0	0	0	0
\$261 to \$270	1	0	0	0	0	1
VEHICLE TOTAL	1,645	1,778	38	10	113	3,584

Volume:		Page No.:	
Topic:	Road Safety		
Sub Topic:			
Issue:			

Question:

Does the Corporation have the ability to estimate the losses for distracted driving at this time?

Rationale for Question:

Road Safety Planning.

RESPONSE:

Please refer to response <u>CMMG (MPI) 1-4b</u>.

Volume:		Page No.:	
Topic:	Rates		
Sub Topic:			
Issue:			

Question:

Please advise what the quantitative effect of the experience adjusting rules was for motorcycles in this application.

Rationale for Question:

Effect of actuarial calculations.

RESPONSE:

The quantitative effect of the experience adjusting rules is presented in <u>Volume II</u>

<u>Ratemaking Page 48</u>, and for the exceptions to these rules, see <u>Volume II</u>

<u>Ratemaking Page 44</u>. Specifically, these rules reduced the required rate decrease for motorcycles from an 'Indicated Rate Change' of -2.1% to an 'Experience Rate

Change' of -1.7%, a difference of approximately \$3.



Volume:		Page No.:	
Topic:	Rates		
Sub Topic:			
Issue:			

Question:

Please provide further explanation quantifying for motorcyclists the effect on their proposed rates due to investment income decreases.

Rationale for Question:

Reviewing effect of investment levels on motorcycle rates.

RESPONSE:

Based on the current ratemaking methodology, as presented in Volume II Ratemaking, the rate of return from investment is 0.88% (see <u>Volume II Ratemaking page 24</u>). For every one percent increase in the rate of return from investment, the required rate change for the Motorcycle major class will decrease by one percent.

However, it is important to note that the rate of return from investment (of 0.88%) is a result of forecasted increases in interest rates, which result in marketable bond losses. On the flip side of the coin, these increases in interest rates also reduce the forecasted unpaid claim liabilities. Most of this reduction is for long-tail PIPP liabilities. Given that a significant portion of total motorcycle claims costs, approximately 87%, are PIPP related costs, the forecasted claims costs for the Motorcycle major class is very favorably affected. Per *Volume II Ratemaking page* 37, and considering only HTA units, the Motorcycle major class is the only class receiving a required rate decrease.

