

MANITOBA PUBLIC INSURANCE

AI.9 ACTUARIAL STANDARDS COMPLIANCE

AI.9.1 Certificate of the Actuary

I, Luke Johnston, a Fellow of the Canadian Institute of Actuaries, certify that:

1. I have derived the indicated rate(s) in accordance with accepted actuarial practice in Canada, on behalf of Manitoba Public Insurance, for the Basic Autopac program for rates effective March 1, 2017 for new and renewal business.
2. I have reviewed the data underlying this rate application for reasonableness and consistency, and I believe the data is reliable and sufficient for the determination of the indicated rate changes.
3. The indicated rate changes, shown in the table below, have been calculated in accordance with accepted actuarial practice in Canada. These indicated rates assume a 0% profit provision.

Major Class	Current Avg. Rate	Proposed Avg. Rate	Indicated Rate Change
Private Passenger	\$1,068	\$1,126	5.4%
Commercial	\$715	\$803	12.3%
Public	\$1,904	\$2,054	7.9%
Motorcycles	\$769	\$809	5.2%
Trailers	\$67	\$75	12.4%
Off-Road Vehicles	\$12	\$8	-34.3%
Overall	\$815	\$862	5.8%

- 1 4. Manitoba Public Insurance and the Public Utilities Board of Manitoba currently
2 utilize a ratemaking methodology that does not conform to all aspects of
3 accepted actuarial practice in Canada. The current methodology was developed to
4 follow actuarial principles, while also meeting the unique circumstances and
5 mandate of the government monopoly automobile insurer. Specifically, the
6 methodology does not conform to the following actuarial standards:

7
8 *2620.01 Canadian Actuarial Standards of Practice: "The best estimate*
9 *present value of cash flows relating to the revenue at the indicated*
10 *rate should equal the best estimate present value of cash flows*
11 *relating to the corresponding claims costs and expenses costs, plus the*
12 *present value of a provision for profit, over a specified period of time."*

13
14 *2620:15 Canadian Actuarial Standards of Practice: "The investment*
15 *return rate for calculating the present value of cash flows would reflect*
16 *the expected investment income to be earned on assets that might be*
17 *acquired with the net cash flows resulting from the revenue at the*
18 *indicated rate."*

19
20 The current Basic Autopac ratemaking methodology does not calculate the
21 expected present value of the cash flows associated with the policies to be issued
22 in the rating period. Instead, the methodology utilizes the Corporation's pro
23 forma financial statements to allocate revenues and costs such that fiscal year
24 net income equates to zero. For this reason, the existing methodology does not
25 comply with actuarial standards of practice. The resulting indicated rates from
26 this methodology are shown in the table below.

Major Class	Current Avg. Rate	Proposed Avg. Rate	Indicated Rate Change
Private Passenger	\$1,068	\$1,111	4.0%
Commercial	\$715	\$789	10.3%
Public	\$1,904	\$2,027	6.5%
Motorcycles	\$769	\$788	2.4%
Trailers	\$67	\$74	11.4%
Off-Road Vehicles	\$12	\$8	-31.3%
Overall	\$815	\$850	4.3%

* Source: Additional filing *October 7, 2016: 2017 GRA, RM.4 page 4*

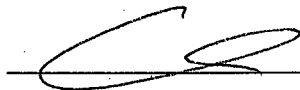
5. The indicated rates per accepted actuarial practice (shown in #3 above) can be adjusted to achieve the break-even fiscal year net income mandate of the Corporation. This adjustment is equivalent to applying a profit provision of approximately -1.3% to the indicated rates. The revised actuarially indicated rates with a -1.3% profit provision, along with a comparison to the rates indicated by the existing methodology, are shown in the table below.

October 7, 2016

2017 RATE APPLICATION
Actuarial Standards Compliance - AI.9

Major Class	Actuarially Indicated Rates with -1.3% Profit Provision		Indicated Rates from Existing MPI/PUB Ratemaking Methodology		Difference	
	Rate	Change	Rate	Change	Rate	Change
Private Passenger	\$1,111	3.9%	\$1,111	4.0%	\$0	-0.1%
Commercial	\$792	10.8%	\$789	10.3%	\$3	0.5%
Public	\$2,026	6.4%	\$2,027	6.5%	(\$1)	-0.1%
Motorcycles	\$797	3.7%	\$788	2.4%	\$9	1.3%
Trailers	\$74	10.9%	\$74	11.4%	\$0	-0.5%
Off-Road Vehicles	\$8	-35.2%	\$8	-31.3%	\$0	-3.9%
Overall	\$850	4.3%	\$850	4.3%	\$0	0.00%

After making the negative profit adjustment to achieve the Corporation's fiscal year break-even net income objective, there are, in my opinion, no material differences in the indicated rates between accepted actuarial practice in Canada and the Corporation's existing methodology.



Signature of Actuary

Oct 7, 2016

Date

Winnipeg, MB

Location

AI.9.2 Basic Rate Indications Determined in Accordance with Accepted Actuarial Practice in Canada

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MANITOBA PUBLIC INSURANCE
MAJOR CLASSIFICATION – REQUIRED RATE CHANGES
Selected Overall Rate Change of 5.8%

	Overall	Private Pass	Comm	Public	Motor- Cycle	Trailer	ORV
17/18 Units	1,166,000	809,600	47,000	12,700	16,200	207,200	73,300
Claims	657.71	859.68	605.15	1,634.02	625.86	53.63	6.08
Claims Expense	111.66	145.95	102.74	277.42	106.26	9.11	1.03
Road Safety	11.70	15.41	15.41	15.41	15.41	0.00	0.00
Operating Expense	72.53	95.51	95.51	95.51	95.51	0.00	0.00
Commission: Vehicle	28.38	37.06	26.64	68.23	26.56	2.48	0.25
Prem Tax: Vehicle	26.27	34.32	24.67	63.18	24.59	2.29	0.23
Comm & Prem Tax: Driver	2.88	3.79	3.79	3.79	3.79	0.00	0.00
Commission Flat Fee	5.25	6.92	6.92	6.92	6.92	0.00	0.00
Reins: Casualty	2.01	2.65	2.65	2.65	2.65	0.00	0.00
Reins: Catastrophe	8.28	8.96	8.96	8.96	0.00	8.96	0.00
Fleet Rebates	13.18	17.68	17.68	17.68	0.00	0.00	0.00
Anti-Theft Discount	2.70	3.89	0.00	0.00	0.00	0.00	0.00
Driver Prem	46.12	60.73	60.73	60.73	60.73	0.00	0.00
Service Fees	20.63	27.17	27.17	27.17	27.17	0.00	0.00
Inv Inc: Driver	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Inv Inc: Vehicle	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Req Rate (Raw)	875.81	1,143.92	822.22	2,105.86	819.64	76.47	7.58
Req Rate (Bal)	861.71	1,125.51	808.98	2,071.97	806.44	75.24	7.46
16/17 Average Rate	773.73	1,001.44	682.70	1,881.84	754.67	64.21	11.95
Major Class Drift	5.3%	6.7%	4.8%	1.2%	1.9%	4.1%	0.0%
17/18 Average Rate Without Rate Change	814.82	1,068.47	715.30	1,904.12	768.87	66.84	11.95
Full Cred Req Change	5.8%	5.3%	13.1%	8.8%	4.9%	12.6%	-37.6%
Applied for Change	5.8%	5.3%	13.1%	8.8%	4.9%	12.6%	-37.6%
Credibility		99.3%	88.7%	67.9%	73.0%	97.2%	92.4%
Cred Wtd Change		5.3%	12.3%	7.8%	5.1%	12.4%	-34.3%
Cred Wtd Req Rate		1,125.50	803.00	2,053.18	808.21	75.11	7.85
Cred Wtd Req Rate (Bal)	861.67	1,126.01	803.37	2,054.12	808.58	75.15	7.86
Cred Wtd Change (Bal)		5.4%	12.3%	7.9%	5.2%	12.4%	-34.3%

MANITOBA PUBLIC INSURANCE
MAJOR CLASSIFICATION – REQUIRED RATE CHANGES

Selected Overall Rate Change of 4.3%

	Overall	Private Pass	Comm	Public	Motor- Cycle	Trailer	ORV
17/18 Units	1,166,000	809,600	47,000	12,700	16,200	207,200	73,300
Claims	657.71	859.68	605.15	1,634.02	625.86	53.63	6.08
Claims Expense	111.66	145.95	102.74	277.42	106.26	9.11	1.03
Road Safety	11.70	15.41	15.41	15.41	15.41	0.00	0.00
Operating Expense	72.53	95.51	95.51	95.51	95.51	0.00	0.00
Commission: Vehicle	27.99	36.55	26.27	67.29	26.19	2.44	0.24
Prem Tax: Vehicle	25.91	33.84	24.33	62.31	24.25	2.26	0.22
Comm & Prem Tax: Driver	2.88	3.79	3.79	3.79	3.79	0.00	0.00
Commission Flat Fee	5.25	6.92	6.92	6.92	6.92	0.00	0.00
Reins: Casualty	2.01	2.65	2.65	2.65	2.65	0.00	0.00
Reins: Catastrophe	8.28	8.96	8.96	8.96	0.00	8.96	0.00
Fleet Rebates	13.18	17.68	17.68	17.68	0.00	0.00	0.00
Anti-Theft Discount	2.70	3.89	0.00	0.00	0.00	0.00	0.00
Driver Prem	46.12	60.73	60.73	60.73	60.73	0.00	0.00
Service Fees	20.63	27.17	27.17	27.17	27.17	0.00	0.00
Inv Inc: Driver	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Inv Inc: Vehicle	11.31	14.78	10.62	27.21	10.59	0.99	0.10
Req Rate (Raw)	863.74	1,128.16	810.89	2,076.85	808.34	75.42	7.48
Req Rate (Bal)	849.84	1,110.00	797.83	2,043.42	795.33	74.21	7.36
16/17 Average Rate	773.73	1,001.44	682.70	1,881.84	754.67	64.21	11.95
Major Class Drift	5.3%	6.7%	4.8%	1.2%	1.9%	4.1%	0.0%
17/18 Average Rate Without Rate Change	814.82	1,068.47	715.30	1,904.12	768.87	66.84	11.95
Full Cred Req Change	4.3%	3.9%	11.5%	7.3%	3.4%	11.0%	-38.4%
Applied for Change	4.3%	3.9%	11.5%	7.3%	3.4%	11.0%	-38.4%
Credibility		99.3%	88.7%	67.9%	73.0%	97.2%	92.4%
Cred Wtd Change		3.9%	10.7%	6.3%	3.7%	10.8%	-35.2%
Cred Wtd Req Rate		1,110.06	791.99	2,025.03	797.13	74.08	7.74
Cred Wtd Req Rate (Bal)	849.86	1,110.57	792.35	2,025.95	797.49	74.12	7.75
Cred Wtd Change (Bal)		3.9%	10.8%	6.4%	3.7%	10.9%	-35.2%