

**TC (MPI) 2-1**

<b>Part and Chapter:</b>	<b>TC (MPI) 1-2 Part V – Revenues</b>	<b>Page No.:</b>	<b>9 of 36</b>
<b>PUB Approved Issue No:</b>	<b>2) Ratemaking, 4) Financial Forecast</b>		
<b>Topic:</b>	<b>HTA Policy Year earned units</b>		
<b>Sub Topic:</b>			

**Preamble to IR:**

In response to TC(MPI) 1-2, MPI states:

*The effective/renewal dates of the corporate policies are not uniformly spread over the year as most corporate customers renew at the beginning of the year. Due to the change in fiscal year, the earned units for these customers were attached to 2020 as opposed to 2021. This is similar to the Commercial Major Class results in 2021/22.*

And,

*MPI performed a sensitivity analysis, assuming the forecast for claims remains constant, and only adjusting the exposure. If HTA units in the Public Major Class decrease (increase) by 10%, the required rate for Public increases (decreases) by approximately 20bps. This does not materially impact the overall required rate of - 0.9%.*

**Question:**

- a) Please explain if this effect was anticipated by management when the shift in fiscal year end was adopted.
- b) Please explain if and how the allocation of HTA units and customer renewal dates impact the risk profile of the Public Major Class.

- c) Please quantify the impact of the change in fiscal year end on Taxi VFH, in dollar terms.
- d) Please estimate the impact of HTA unit changes on required rate for the Commercial Major Class, and explain any differences in results.
- e) Please propose methods to remedy this pricing anomaly, both for the current test year, and in the future (if applicable).

**Rationale for Question:**

To fully understand the implications of the change in fiscal year end on Public and Commercial Major Class rates.

**RESPONSE:**

- a) MPI did anticipate that there would be impacts from the change in fiscal year. Due to the 13 month fiscal year, MPI adjusted policy year 2020/21 to reflect a 12 month policy year for forecasting purposes and in consideration of customer renewal dates causing a shift in HTA unit allocation.
- b) A customer's renewal date determines the policy year to which their units are allocated. This is not expected to have a significant impact on individual customers as their renewals are likely to be uniformly spread over the policy year. However, policies for corporate customers comprises of multiple vehicles. If the renewal date for corporate customer is attached to a different policy year, multiple vehicles can be affected and this can affect the risk profile. The Public Major Class consists of corporate customers so this phenomena is relevant. Also, the overall size of this class is not very large. Therefore, the impact to the risk profile caused by a change in policy year of a few corporate customer would not be insignificant. The customers, however, were not affected as a result of this.
- c) MPI interprets this question assuming the inquiry concerns the 2023 rates sought in this application. As such, there would be no impact as a result of the fiscal year

end change because the selected growth rates used to forecast the HTA units are based on policy years 2019/20 and prior. These historical policy years have been adjusted to reflect the new fiscal year.

- d) MPI performed a sensitivity analysis, assuming the forecast for claims remains constant, and only adjusting the exposure. If HTA units in the Commercial Major Class decrease (increase) by 2,000 units, the required rate for Commercial increases (decreases) by approximately 8bps.
- e) This anomaly only impacted the 2020-2021 policy years. The system has been adjusted, as such, this is not expected to occur again.

**TC (MPI) 2-2**

<b>Part and Chapter:</b>	<b>TC(MPI) 1-3 Part V – Revenues Part II - VFH</b>	<b>Page No.:</b>	<b>14 of 36 22 of 35</b>
<b>PUB Approved Issue No:</b>	<b>2) Ratemaking 10) VFH</b>		
<b>Topic:</b>	<b>Fleet Rebates and proposed Blanket VFH Insurance</b>		
<b>Sub Topic:</b>			

**Preamble to IR (If Any):**

MPI provided some details on Blanket policy administration.

**Question:**

- a) Please explain if MPI anticipates that the Fleet Program administration will also be built into Duck Creek?
- b) Please explain if MPI has any expectation on the potential magnitude of Blanket policy rebates, relative to the Fleet program, or relative to the group of insureds under the blanket policy.
- c) Please explain if MPI has developed any policy positions with respect to funding the Blanket policy rebates (vis-à-vis the Fleet Program), even if the details are still unknown.
- d) Please explain if MPI also believes that Taxi VFH would be incentivized to promote safe driving among their drivers, should a taxi operator elect the Blanket policy and if so, how or in what way(?).

**Rationale for Question:**

To fully understand the implications of Blanket policies on VFH insurance.

**RESPONSE:**

- a) Fleet Administrator is in scope for Project Nova. The upcoming discovery for Release 3 will determine whether Fleet Administrator is built within the Duck Creek platform or Digital Dynamics 365 platform.
- b) MPI is examining and considering the magnitude of rebates associated with the Blanket policy, the model is currently in actuarial development. The product and pricing design of the model is being completed with Passenger VFH and VFH experience, and not with a focus on the Fleet Program. Relative to the Transportation Network Company (TNC) dispatchers, substantial rebates are not an expectation for the blanket policy.
- c) Concerning policy, product and business decisions around the rebates, surcharges, and other pricing elements, MPI will finalize each component once the actuarial build is complete, at which point information, assumptions and data will be available to allow the Corporation to make informed decisions.
- d) The proposed blanket policy is a dispatcher purchased policy, meaning Taxi dispatching companies (i.e., Unicity Taxi, Duffy's, etc.) would be required to be the policyholders, not taxi operators. If Taxi companies were to be policyholders, it is possible that they would be incentivized to promote safe driving among their affiliated Taxis, however MPI cannot confirm that this would be the outcome as it doesn't oversee the actions, rules and/or safe driving programs employed by dispatchers.

**TC (MPI) 2-3**

<b>Part and Chapter:</b>	<b>TC(MPI) 1-4 Part V Claims Incurred</b>	<b>Page No.:</b>	<b>20 of 95</b>
<b>PUB Approved Issue No:</b>	<b>9. Claims forecasting</b>		
<b>Topic:</b>	<b>Forecasted impact to ultimates related to working from home</b>		
<b>Sub Topic:</b>			

**Preamble to IR (If Any):**

MPI provides some details on its definition of driving behavior, stating:

MPI defines "driving behaviour" in this context as referring to the multiple factors that increase the risk that a claim will occur. These **include things like** the time of day in which a person drives, how often they drive, the conditions of the road during their drives (e.g., increased congestion or an increased number of vehicles on the road).

And

As outlined in *Claims Incurred Chapter CI.2.11*, collision frequency in 2021/22 varies from 10% to 20% below the 2015/16-2019/20 trended frequency (i.e., the baseline forecast excluding any COVID-19 impacts). **MPI attributes this decrease to the impact of WFH.**

**Question:**

- a) Please confirm that the list of driving behaviors provided is not exhaustive, and explicitly clarify if distance travelled and time on road are considered elements of 'driving behavior' and factors in MPI's adjustment.

- b) Please explain how 'road condition' is a driving behavior. Does this relate to geography (e.g., rural vs urban roads), or seasonality (winter vs. summer driving)? Please explain how this variable was considered in MPI's adjustment.
- c) Please explain if there are other plausible explanations for the decrease in collision frequency, and to what degree is the WFH adjustment based on assumptions, either about past behavior, or future intentions? If it is based on assumptions, please outline the assumptions adopted.
- d) Please explain what level of credibility MPI assigns to the WFH adjustment? Is 2 years of data considered credible, and to what degree? Can MPI assess the credibility of surveyed intentions?

**Rationale for Question:**

To fully understand the parallels between time band pricing, the WFH adjustment, and possible part time pricing for Taxi VFH.

**RESPONSE:**

- a) MPI confirms that it does not intend the list of driving behaviours provided above to be exhaustive. Distance travelled and time on road (which of course are closely related) are undoubtedly important vehicle usage attributes and factors into the MPI work from home (WFH) adjustment.
- b) MPI acknowledges that the phrase "road condition" may be confusing. MPI does not intend for road condition to specifically relate to rural versus urban or winter versus summer driving. In this context, "traffic condition" would be a more appropriate phrase as it refers to traffic decline. The estimated impact of traffic decline cannot be quantified on its own but is reflected in the forecasted impacts to ultimates related to WFH, which MPI embeds with all other types of changes to driving behaviours.

- c) It is extremely difficult, if not impossible, to isolate the effect of COVID-19 and WFH from other plausible explanations for the decrease in collision frequency, if there are any others. The survey MPI conducted was its attempt to quantify COVID-19 and the associated WFH impact. The entire survey and the assumptions made by MPI is fully documented in *Claims Incurred Chapter CI.2.11*. MPI used no other assumptions.
- d) The Pandemic and the dramatic shift to WFH are unprecedented events. No actuarial literature exists on a loss experience-based credibility standard to account for such impacts. With regards to the survey methodology, which is fully disclosed in *Claims Incurred CI Attachment A – Driving Behaviour Survey Results Summary Feb 28-2022*, MPI gave no special consideration to statistical confidence. The volume of survey results is the best that MPI can possibly achieve through its existing channel of collecting customer inputs.



**TC (MPI) 2-4**

<b>Part and Chapter:</b>	<b>TC(MPI) 1-5 Part V Claims Incurred</b>	<b>Page No.:</b>	<b>47 of 95</b>
<b>PUB Approved Issue No:</b>	<b>9) Claims Forecasting</b>		
<b>Topic:</b>	<b>Severity Growth Trend</b>		
<b>Sub Topic:</b>			

**Preamble to IR:**

MPI provided a link to Statistics Canada Table 18-10-0004-07. The linked table appears to refer to Whitehorse and Yellowknife, and for a time period different than what was quoted in the response.

**Question:**

- a) Please provide a copy of the table (and a link) to the Statistics Canada table that contains the data referenced in part c) of the response.
- b) Please provide the Manitoba CPI for August 2022, provided it has been released, and comment on any trend in monthly inflation figures.

**Rationale for Question:**

To understand the basis for the MPI's first round response, and assess up to date inflation results.

**RESPONSE:**

- a) See the table below, which shows the data for Manitoba as of March 2022. The table provided is a subset of the data given in Statistics Canada table 18-10-0004-07. The title given identifies that the data can be broken down into the Canadian provinces as well as Whitehorse and Yellowknife.

Manitoba CPI for Transportation as of March 2022<sup>1</sup>

Geography	Manitoba ( <a href="#">map</a> )				
	March 2021	February 2022	March 2022	February 2022 to March 2022	March 2021 to March 2022
Products and product groups <sup>3,4</sup>	2002=100				
Transportation	141.6	155.5	163.9	5.4	15.7
Private transportation	139.2	153.7	162.0	5.4	16.4
Purchase, leasing and rental of passenger vehicles	115.8	122.7	125.2	2.0	8.1
Purchase and leasing of passenger vehicles	115.6	122.3	124.8	2.0	8.0
Purchase of passenger vehicles <sup>5</sup>	116.4	123.3	125.7	1.9	8.0
Rental of passenger vehicles	..	..	..	...	...
Operation of passenger vehicles	160.2	182.7	196.1	7.3	22.4
Gasoline	178.0	225.8	260.4	15.3	46.3
Passenger vehicle parts, maintenance and repairs	151.9	163.5	163.5	0.0	7.6
Other passenger vehicle operating expenses	146.4	148.3	148.3	0.0	1.3
Passenger vehicle insurance premiums <sup>6</sup>	122.3	125.1	125.1	0.0	2.3
Passenger vehicle registration fees	238.2	221.1	221.1	0.0	-7.2
Drivers' licences	..	..	..	...	...
Parking fees	..	..	..	...	...
Public transportation	168.4	168.4	177.3	5.3	5.3
Local and commuter transportation	149.7	154.1	154.1	0.0	2.9
City bus and subway transportation	164.4	170.9	170.9	0.0	4.0
Taxi and other local and commuter transportation services	124.1	124.1	124.1	0.0	0.0
Inter-city transportation	176.2	174.3	187.2	7.4	6.2
Air transportation <sup>7</sup>	..	..	..	...	...
Rail, highway bus and other inter-city transportation	..	..	..	...	...

## Symbol legend:

- not available for a specific reference period

... not applicable

- b) Manitoba inflation in August 2022 was up 8.0% on a year over year basis. This is down from the recent peak of 9.4% in June 2022. Manitoba inflation remains well above the 5-year average of 2.9%.

<sup>1</sup> [Consumer Price Index, monthly, percentage change, not seasonally adjusted, Canada, provinces, Whitehorse and Yellowknife — Transportation](#)

**TC (MPI) 2-5**

<b>Part and Chapter:</b>	<b>TC (MPI) 1-7 Part VI DSR</b>	<b>Page No.:</b>	<b>9 of 15</b>
<b>PUB Approved Issue No:</b>	<b>11) DSR</b>		
<b>Topic:</b>	<b>DSR Transition scenarios</b>		
<b>Sub Topic:</b>			

**Preamble to IR:**

MPI states:

Whereas the actuarially determined DSR levels provide a more equitable pricing basis, a sudden change in the discount levels **may not be practically possible**.

**Question:**

Please explain why a sudden change may be practically impossible, and at what level of change in discount level does it become impossible.

**Rationale for Question:**

To fully understand the information response, and MPI's basis for selection.

**RESPONSE:**

MPI attempts to avoid large sudden changes, as much as possible, to avoid rate shock. Please refer to *CMMG (MPI) 1-10* for further explanation on the reasonability of rate changes.

**TC (MPI) 2-6**

<b>Part and Chapter:</b>	<b>TC (MPI) 1-17 Part VI – RM Appendix 9</b>	<b>Page No.:</b>	
<b>PUB Approved Issue No:</b>	<b>9) Claims Forecasting</b>		
<b>Topic:</b>	<b>Public Major Class and VFH Rates</b>		
<b>Sub Topic:</b>			

**Preamble to IR:**

Some factor selection for the Public Major class has changed.

**Question:**

Please elaborate on the reasons for changing factor selection in Collision (36-48 to 60-72) and Comprehensive (36-48 & 48-60)

**Rationale for Question:**

To understand year to year changes impacting the Public Major Class.

**RESPONSE:**

The selection for Collision (36-48 to 60-72) and Comprehensive (36-48 & 48-60) was judgmentally selected in the 2022 GRA. The selection using judgement and the selection using the same method as the development factors for 12-24 and 24-36 would not have been materially different. In order to be consistent, MPI changed the selection in Collision and Comprehensive.

**TC (MPI) 2-7**

<b>Part and Chapter:</b>	<b>TC(MPI) 1-10 Part VII – RSR</b>	<b>Page No.:</b>	<b>6 of 24</b>
<b>PUB Approved Issue No:</b>	<b>18) Capital Management Plan</b>		
<b>Topic:</b>	<b>RSR Target and Range</b>		
<b>Sub Topic:</b>			

**Preamble to IR:**

In response to TC(MPI) 1-10(m), MPI provided Figure 2, a table of comparing actual to base year forecast for headline Pro-Forma line items. TC appreciates the effort required to create this comparison. TC also understands that the analysis is comparing forecasting accuracy at the T+1 horizon. Taking, for example, Net Premiums Written in 2018/19, the Actual value \$1,058,027 appears in the 2020 GRA ProForma Actual Column, and the 2019 GRA base forecast value of \$1,076,138 appears in the 2019 GRA, putting only one year of forecast horizon between the estimates.

The analysis TC seeks is of MPI's forecasting power at T+4 and T+5. For this comparison, taking again the Net Premiums written for 2018/19, the actual value of \$1,058,027 (presented in the 2020 GRA) should be compared to the 2016 GRA for a T+4 year comparison, and the 2015 GRA for a T+5 year comparison.

The T+4 year forecast variance would be  $\$1,058,027 - \$978,889 = \$79,138$ .

**Question:**

Please provide an analysis of forecast variances at T+4 and T+5 years, for at least the last 5 years of actuals.

**Rationale for Question:**

To assess MPI's forecasting accuracy at T+4 and T+5 years, as these forecasts are relevant to the CMP, and projections for capital release and/or build.

**RESPONSE:**

Please refer to *Appendix 1*.

Financial Summary - Actual vs GRA Forecast Base (Provisional)

Line No.	(\$000s, unless otherwise noted)	2016/17					2017/18					2018/19					2019/20*					2020/21					2021/22**				
		2014 GRA Forecast Base	2013 GRA Forecast Base	Higher/(Lower) than 2014 GRA	Higher/(Lower) than 2013 GRA	2015 GRA Forecast Base	2014 GRA Forecast Base	Higher/(Lower) than 2015 GRA	Higher/(Lower) than 2014 GRA	2016 GRA Forecast Base	2015 GRA Forecast Base	Higher/(Lower) than 2016 GRA	Higher/(Lower) than 2015 GRA	2017 GRA Forecast Base	2016 GRA Forecast Base	Higher/(Lower) than 2017 GRA	Higher/(Lower) than 2016 GRA	2018 GRA Forecast Base	2017 GRA Forecast Base	Higher/(Lower) than 2018 GRA	Higher/(Lower) than 2017 GRA	2019 GRA Forecast Base	2018 GRA Forecast Base	Higher/(Lower) than 2019 GRA	Higher/(Lower) than 2018 GRA						
1	<b>Statement of Operations Items:</b>																														
2	<b>Total Net Premiums Written</b>	923,789	917,405	910,996	6,384	12,793	994,593	982,782	954,618	11,811	39,975	1,058,027	1,022,360	1,027,783	35,667	30,244	1,107,425	1,089,107	1,070,112	18,318	37,313	1,144,932	1,174,220	1,139,452	(29,288)	5,480	1,065,220	1,239,068	1,221,539	(173,848)	(156,319)
3	<b>Total Earned Revenues</b>	927,893	922,135	916,334	5,758	11,559	982,991	986,641	962,885	(3,650)	20,106	1,051,503	1,027,176	1,033,176	24,327	18,327	1,116,446	1,093,663	1,076,008	22,783	40,438	1,146,260	1,181,025	1,144,902	(34,765)	1,358	1,131,060	1,246,340	1,230,351	(115,280)	(99,291)
4	<b>Total Claims Incurred</b>	860,035	667,171	711,718	192,864	148,317	767,239	748,183	683,734	19,056	83,505	892,258	823,617	826,983	68,641	65,275	761,455	861,741	862,218	(100,286)	(100,763)	653,828	957,110	912,138	(303,282)	(258,310)	705,809	1,006,592	1,007,460	(300,783)	(301,651)
5	<b>Total Claims Costs</b>	993,537	800,632	848,860	192,905	144,677	923,722	886,103	830,780	37,619	92,942	1,030,667	971,838	975,950	58,829	54,717	905,513	1,016,140	1,010,305	(110,627)	(104,792)	803,256	1,113,131	1,073,931	(309,875)	(270,675)	862,423	1,163,925	1,165,131	(301,502)	(302,708)
6	<b>Total Expenses</b>	140,323	138,672	138,865	1,651	1,458	141,165	151,233	144,255	(10,068)	(3,090)	151,855	152,793	160,440	(938)	(8,585)	149,940	160,324	156,522	(10,384)	(6,582)	141,824	160,936	168,529	(19,112)	(26,705)	154,366	168,583	166,227	(14,217)	(11,861)
7	<b>Underwriting Income</b>	(205,967)	(17,169)	(71,391)	(188,798)	(134,576)	(81,896)	(50,694)	(12,149)	(31,202)	(69,747)	(131,019)	(97,455)	(103,213)	(33,564)	(27,806)	60,993	(82,801)	(90,819)	143,794	151,812	201,180	(93,042)	(97,558)	294,222	298,738	114,271	(86,168)	(101,007)	200,439	215,278
8	<b>Net Investment Income</b>	82,897	37,668	104,101	45,229	(21,204)	116,320	77,345	36,389	38,975	79,931	209,856	100,443	128,259	109,413	81,597	59,614	88,972	108,129	(29,358)	(48,515)	89,602	85,863	103,881	3,739	(14,279)	(47,080)	87,773	84,391	(134,853)	(131,471)
9	<b>Net Income</b>	(123,070)	20,500	32,710	(143,570)	(155,780)	34,424	26,651	24,240	7,773	10,184	78,837	2,988	25,046	75,849	53,791	120,607	6,171	17,310	114,436	103,297	290,782	(7,179)	6,323	297,961	284,459	67,191	1,605	(16,616)	65,586	83,807
10	<b>Statement of Equity Items:</b>																														
11	<b>Total Equity Balance</b>	181,000	162,126 <sup>A</sup>	264,023 <sup>A</sup>	n/a	n/a	210,845	181,620	186,366 <sup>A</sup>	29,225	n/a	249,692	256,240	201,507	(6,548)	48,185	406,225	250,792	283,196	155,433	123,029	433,835	200,513	265,390	233,322	168,445	410,761	318,291	192,297	92,470	218,464
12	<b>Capital Available</b>	108,134	n/a	n/a	n/a	n/a	155,177	n/a	n/a	n/a	n/a	203,766	n/a	n/a	n/a	n/a	371,262	169,091	n/a	202,171	n/a	401,793	126,174	n/a	275,619	n/a	366,074	257,132	n/a	108,942	n/a
13	<b>Minimum Capital Required</b>	366,039	n/a	n/a	n/a	n/a	349,600	n/a	n/a	n/a	n/a	395,393	n/a	n/a	n/a	n/a	350,820	377,164	n/a	(26,344)	n/a	410,793	446,947	n/a	(36,154)	n/a	384,411	367,331	n/a	17,080	n/a
14	<b>MCT Ratio</b>	29.5%	n/a	n/a	n/a	n/a	44.4%	n/a	n/a	n/a	n/a	51.5%	n/a	n/a	n/a	n/a	105.8%	44.8%	n/a	61.0%	n/a	100.0%	28.2%	n/a	71.8%	n/a	95.2%	70.0%	n/a	25.2%	n/a

14 \*After Capital maintenance provision  
15 \*\*After Capital release provision  
16 ^ Retained Earnings Only  
17

**TC (MPI) 2-8**

<b>Part and Chapter:</b>	<b>Part VI DSR</b>	<b>Page No.:</b>	<b>9 of 15</b>
<b>PUB Approved Issue No:</b>	<b>11) DSR</b>		
<b>Topic:</b>	<b>DSR Transition scenarios</b>		
<b>Sub Topic:</b>	<b>TC (MPI) 1-7</b>		

**Preamble to IR:**

TC (MPI) 1-7 and;

Part VI – Ratemaking

RM.2 Rate Model

12 For Basic, the vehicle classification plan groups vehicles together by using the

13 following four classifications: rating territories, insurance uses, vehicle rating factors,

14 and driving records

**Question:**

Base rate is one component that determines what an individual insured will pay.

- a) Please confirm that base rate is one component that determines what rate an individual will be charged.
- b) Please confirm insurance use is another component that determines what rate an individual will be charged.
- c) What range of base rate movement is reasonable over a one-year period?



- d) What range of insurance use rate movement is reasonable over a one-year period?
- e) Do insureds know where the change in rate they are charged originates from in terms of the rating component?

**Rationale for Question:**

To fully understand MPI's proposed adjustment to the DSR discounts.

**RESPONSE:**

- a) MPI confirms that the base rate is one of the drivers of the rate that is charged to an individual.
- b) MPI confirms that insurance use is one of the drivers of the rate that is charged to an individual
- c) The range of reasonableness of the movement in base rates over a one-year period is a function of many factors, some of which are external to MPI, e.g. inflation, supply issues, weather changes etc. Please refer to [CMMG 1-10\(a\)](#) for more details.
- d) For the movement in the rates of insurance use, the response as indicated in c) above applies.
- e) The MPI website provides complete details of the rating methodology along with the results. The break down of the premium into basic rate, insurance use and its comparison with the previous year may be too complicated to explain in a letter or document. MPI expects the intermediary to explain the cause of any changes in rates to the insureds.

**TC (MPI) 2-9**

<b>Part and Chapter:</b>	<b>Part VI – RM Appendix 9 Part VI – RM Appendix 12</b>	<b>Page No.:</b>	<b>155 of 165 and 102 of 112</b>
<b>PUB Approved Issue No:</b>	<b>2) Ratemaking</b>		
<b>Topic:</b>	<b>Indicated Rate Calculation</b>		
<b>Sub Topic:</b>	<b>TC (MPI) 1-19</b>		

**Preamble to IR (If Any):**

TC (MPI) 1-19

**Question:**

- a) Please explain, in layman’s terms, how the indication moved from +410.15% to +15.55% for TC (MPI) 1-19 (c). Please include an explanation in layman’s terms what assumptions changed.
- b) Please explain, in technical terms, how the indication moved from +410.15% to +15.55% for TC (MPI) 1-19 (c). Please describe what assumptions changed.
- c) Would MPI agree that Serious Losses are a subset of all losses?
- d) Does MPI consider Serious Losses to be statistically credible as a whole?
- e) Does MPI consider the Number of Serious Losses for Vehicles-For-Hire to be statistically credible for a Serious Loss Loading?
- f) Does MPI consider Serious Losses for Passenger Vehicle-For-Hire, which has data since 2018, to be statistically credible for a Serious Loss Loading?
- g) Does MPI consider other insurance uses, which have 10 years of data but no serious losses, to be statistically credible for a Serious Loss Loading?

**Rationale for Question:**

To allow for examination of the reasonableness of MPI's assumptions for the purposes of ratemaking.

**RESPONSE:**

- a) The underlying assumption of the two sets of calculations are very similar except there was a difference in interpretation concerning one of the aspects of the methodology recommended under Directive 11.3. MPI originally interpreted Directive 11.3 to mean allocation of serious losses by vehicle type by use of the frequency of collision claims, based on the last five years. MPI first calculated the serious losses over the last ten years for each vehicle type to determine the ten-year average, please refer to *Ratemaking RM Appendix 12, Table 9a*. MPI then calculated the collision frequency for each use and territory based on the last five years (*Ratemaking RM Appendix 12, Table 11a and Table 15*). The frequencies calculated for each use and territory are aggregated together by vehicle type. MPI then recalculated the balanced frequency for each use and territory to allocate the ten-year average serious losses. Please see example below for the step-by-step calculation on how MPI arrived at the +410.15% indicated rate change.

For Passenger Vehicle-For-Hire (Passenger Vehicle) in Territory 1, the calculated frequency is 0.37 (965/2,634). The aggregate frequency for Passenger Vehicle Territory 1 is 3.38. The balanced frequency for Passenger Vehicle-For-Hire (Passenger Vehicle) is calculated to be 0.11 (0.37/3.38). The ten-year average serious loss for Passenger Vehicle Territory 1 is 17,596,930. The serious loss load for Passenger Vehicle-For-Hire (Passenger Vehicle) Territory 1 is calculated to be 1,907,075 (0.11\*17,596,930), which leads to an indicated rate change of +410.15%.

Per *PUB (MPI) 1-8*, MPI was directed to interpret the original Directive 11.3 differently and revise the calculation. Please see example below for the step-by-step calculation on how the +15.55% indicated rate was calculated.

The ten-year average serious loss for Passenger Vehicle All Territory is 35,141,346 (351,413,455/10). The five-year average collision claims counts for Passenger Vehicle All Territory is 77,124 (385,619/5). Serious loss loading per collision claim for Passenger Vehicle is calculated to be 455.65 (35,141,346/77,124). Passenger Vehicle-For-Hire (Passenger Vehicle) Territory 1 is calculated to have a serious loss loading of 439,701 (455.65\*965 claim counts), which leads to an indicated rate change of +15.55%.

- b) Please refer to part a).
- c) MPI would agree that Serious Loss is a subset of all losses.
- d) MPI considers Serious Losses as a whole to be statistically credible.
- e) MPI considers Serious Losses for Vehicles-For-Hire to be statistically credible based on the number of claim counts.
- f) MPI considers Serious Losses for Passenger Vehicle-For-Hire, to be partially credible. Since inception, Passenger Vehicle-For-Hire has experienced a significant number of collision claims.
- g) MPI considers other insurance uses, which have 10 years of data and a large exposure base, but no serious losses, to be statistically credible.

**TC (MPI) 2-10**

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<b>PUB Approved Issue No:</b>	<b>12. Operational Benchmarking</b>		
<b>Topic:</b>	<b>Benchmarking</b>		
<b>Sub Topic:</b>	<b>TC (MPI) 1-20</b>		

**Preamble to IR:**

TC (MPI) 1-20

**Question:**

In the response to TC (MPI) 1-20, MPI states that "when the insurance use is not flat rated, newer, and more expensive vehicles are rated higher"

- a) Please confirm vehicle make and model are used to rate private passenger vehicles.
- b) Please confirm that newer vehicles generally cost more to repair/replace.
- c) Does flat rating by insurance use cause subsidization?

**Rationale for Question:**

To allow for examination of the reasonableness of MPI's assumptions for the purposes of ratemaking.

**RESPONSE:**

- a) MPI confirms that vehicle make and model are used to rate private passenger vehicles.

- b) MPI confirms that newer vehicles generally cost more to repair/replace.
  
- c) The intention of using flat rates for Taxi VFH and Limousine VFH is to not restrict the use of newer and more expensive vehicle, which would otherwise be more expensive to insure. A flat rating structure does allow for some cross subsidy between older and newer vehicles. However, in the case of taxis, most of the vehicles are older, which indicates the concept of cross subsidization to be largely insignificant.