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**Consumers' Association of Canada (Manitoba) (CAC)
Responses to 2024 GRA Intervener Evidence Information Requests
Submitted by the Public Utilities Board (PUB)**

October 4, 2023

1 **PUB (CAC)-1**

Part and Chapter:	CAC Manitoba Intervener (Oliver Wyman) Evidence	Page No.:	4.1
PUB Approved Issue No:	11. Claims forecasting, including but not limited to PIPP and changes or enhancements to claims forecasting design		
Topic:	Accident year weights		
Sub Topic:			

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

4 As shown in Table 3 of OW Actuarial Evidence, MPI selected accident year weights by
 5 coverage, whereby for AB-WI, AB-O(I), BI, CL, and PD, it gave 20% weight to each of
 6 2017, 2018, 2019, 2021, and 2022, and for AB-O(NI) and CM it gave 20% weight to
 7 each of 2018, 2019, 2020, 2021, and 2022.

8 Oliver Wyman selected alternative weights as shown in Table 4, with an estimated
 9 impact on the overall rate indication as shown in Table 7 of -2.52%.

10 **Question:**

11 What would Oliver Wyman have calculated the impact on the estimated overall rate
 12 indication to be if it used 20% weights to each of 2018, 2019, 2020, 2021, and 2022
 13 for each coverage? Please use the MPI trend selections for this calculation.

14 **Rationale for Question:**

15 To gain further understanding into the impact of the accident year weight selection.

16 **RESPONSE:**

- 1 Based on Oliver Wyman’s replication of the MPI rate indication, we estimate the loss
- 2 cost indication to be -1.54% and the rate indication to be -1.41%.

3 **RATIONALE FOR REFUSAL TO FULLY ANSWER THE QUESTION:**

1 **PUB (CAC)-2**

Part and Chapter:	CAC Manitoba Intervener (Oliver Wyman) Evidence	Page No.:	4.1
PUB Approved Issue No:	11. Claims Forecasting		
Topic:	Accident year weights		
Sub Topic:			

2

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

4 As shown in Table 4, for AB-WI, AB-O(I), BI, CL, and PD, Oliver Wyman has proposed
5 weights of 25% to each of 2018, 2019, 2022, and splits a combined 25% weight for
6 accident years 2020 and 2021 in a manner that considers whether 2020 or 2021 are
7 possible outliers.

8 This approach considers the relative likelihood of 2020 and 2021, given the observations
9 for all other years as follows:

10 *The absolute likelihood based on the mean and standard deviation of the*
11 *observations from 2009-2019 and 2022. We calculate the difference between the*
12 *2020 and 2021 application and the mean of unaffected years and normalize by*
13 *dividing by standard deviation. We calculate the zscore for the deviation and use*
14 *a two-tailed distribution to determine the probability of observing a value as or*
15 *more extreme than observation for 2020 and 2021. We normalize the absolute*
16 *likelihoods to determine the relative likelihoods.*

17 **Question:**

18 a) Approximately how many rate filings in Canada has Oliver Wyman reviewed in
19 the last 12 months?

20 b) What percentage of those rate filings gave less weight to accident year 2020?

- 1 c) How many of those rate filings gave a weight of 0 to accident year 2020?
- 2 d) What percentage of those rate filings gave less weight to accident year 2021?
- 3 e) What percentage of those rate filings used different accident year weights for
4 every coverage (with less weight given to 2020 and 2021 than to other years)?
- 5 f) How many rate filings did Oliver Wyman review in which the relative likelihood
6 of accident years 2020 and 2021 was used to determine the weight applied to
7 those years?
- 8 g) For coverages in which accident years 2009 to 2019 and 2022 were not
9 selected for the trend, why does Oliver Wyman believe that this regression
10 should be used for the estimation of the relative likelihood?
- 11 h) If Oliver Wyman applied this approach of relative likelihood to all of accident
12 years 2018 through 2022, what would be the indicated weights for each
13 accident year for each coverage?
- 14 i) For Property Damage, this method gives less weight to accident year 2020 than
15 2019 even though 2019 is further away from the mean, and hence would be
16 less relatively likely to occur. Why does Oliver Wyman believe this to be
17 appropriate?
- 18 j) If claims costs are not normally distributed, and are skewed upwards, does
19 Oliver Wyman agree that this method will systematically bias downwards the
20 weighted average?

21 **Rationale for Question:**

22 To understand the rationale of Oliver Wyman's suggested alternative accident year
23 weighting methodology.

24 **RESPONSE:**

- 1 Please note that we have a typographical error in the cited footnote. The second
2 sentence should be “We calculate the difference between the 2020 and 2021
3 *projections* and the mean of unaffected years and normalize by dividing by standard
4 deviation.” (emphasis added)
- 5 a) As noted in footnote 3, we review commercial rate filings in Alberta, Ontario, New
6 Brunswick, Newfoundland and Labrador, and Nova Scotia and the rate filings of the
7 crown corporations in British Columbia and Saskatchewan, in addition to MPI.
8 Please note, that we review rate filings for all classes of vehicle insurance.
- 9 Our rate filing reviews often require several months to complete. As such there
10 may be inconsistent definitions of “last 12 months.”
- 11 In addition, many private/commercial insurer groups will simultaneously file rates
12 applications for multiple companies and/or multiple classes of business
13 complicating the definition of “rate filings.”
- 14 The prior comments notwithstanding, we have incepted the review of rate filings
15 for 23 insurers groups and one crown corporation (ICBC) in 2023. If we pro-rate
16 this for time (12 months / 8 months) and count “rate filings” as one class of
17 business for one underwriting company, we estimate that we have review
18 approximately 75 private/commercial insurer filings in a 12-month period. We
19 review between one and three crown corporations (including MPI) in a typical 12-
20 month period. (Please note that we also review rate filings for US regulators in
21 Rhode Island, Virginia, Vermont, and Connecticut. We did not count those reviews
22 in our response.)
- 23 b) We do not track this data and are unable to provide a response without significant
24 effort. In addition, the fiscal/accident periods in the filings we review vary, so it is
25 difficult to consistently define “2020” and “2021.” The rate filings we review
26 generally, but not always, adjust loss experience and/or the weights applied to
27 experience periods affected by the pandemic.

- 1 c) We do not track this data and are unable to provide a response without significant
2 effort. In addition, the fiscal/accident periods in the filings we review vary, so it is
3 difficult to consistently define “2020” and “2021.” The rate filings we review
4 generally, but not always, adjust loss experience and/or the weights applied to
5 experience periods affected by the pandemic.
- 6 d) We do not track this data and are unable to provide a response without significant
7 effort. In addition, the fiscal/accident periods in the filings we review vary, so it is
8 difficult to consistently define “2020” and “2021.” The rate filings we review
9 generally, but not always, adjust loss experience and/or the weights applied to
10 experience periods affected by the pandemic.
- 11 e) We do not track this data and are unable to provide a response without significant
12 effort. In addition, the fiscal/accident periods in the filings we review vary, so it is
13 difficult to consistently define “2020” and “2021.” The rate filings we review
14 generally, but not always, adjust loss experience and/or the weights applied to
15 experience periods affected by the pandemic.
- 16 f) We are not aware of any rate filings that used the “relative likelihood” approach
17 that we suggested.
- 18 g) It is common for insurers to rely on the most recent 5 accident years of experience
19 to develop rate indications by adjusting historical loss costs to the prospective rate
20 level. The most common approach for selecting accident year weights includes:
21 using a simple average (e.g. 20% weight to each year), applying weights that are
22 proportional to historical exposure, or increasing the weight applied to the more
23 recent years if there has been a significant change in experience (e.g., a steep rise
24 in volume of vehicles insured). The “relative likelihood” approach was proposed as
25 a solution to address a unique issue, namely the additional uncertainty
26 surrounding the 2020 and 2021 claims experience data. Rather than excluding
27 these data altogether, this approach systematically allocates 25% between the two
28 years. As a point of clarification, our suggested “relative likelihood” approach for
29 distributing accident year weights is independent of the trend regression models.
30 We appreciate that the spirit of this question is to request information as to why

1 years that are not used in the selected trend models should be used in the
 2 calculation of relative likelihood. We consider it reasonable to use those data points
 3 in the “relative likelihood” calculation, because the calculated weights are *relative*.
 4 That is, although the inclusion of such points would affect the calculation of
 5 absolute likelihood for 2020 and 2021, we expect that any bias in the weights for
 6 2020 and 2021 would “wash out” when we calculate the *relative* likelihood.

7 h) It was not our intention to suggest the relative likelihood approach for general use
 8 for assigning weights, but instead as a solution for the unique challenge associated
 9 with the 2020 and 2012 claims experience. We find more traditional allocation
 10 methods (.e.g., that approximate the distribution of exposures across years) to be
 11 appropriate and reasonable. As noted in the description of our calculation of
 12 relative likelihood, we use the “train” data (i.e., 2009 to 2019 and 2022) to
 13 estimate the distribution of loss cost projections and that distribution is then used
 14 to calculate the relative likelihoods. Notably, we don’t include 2020 and 2021 in
 15 the basis for the likelihood calculation.

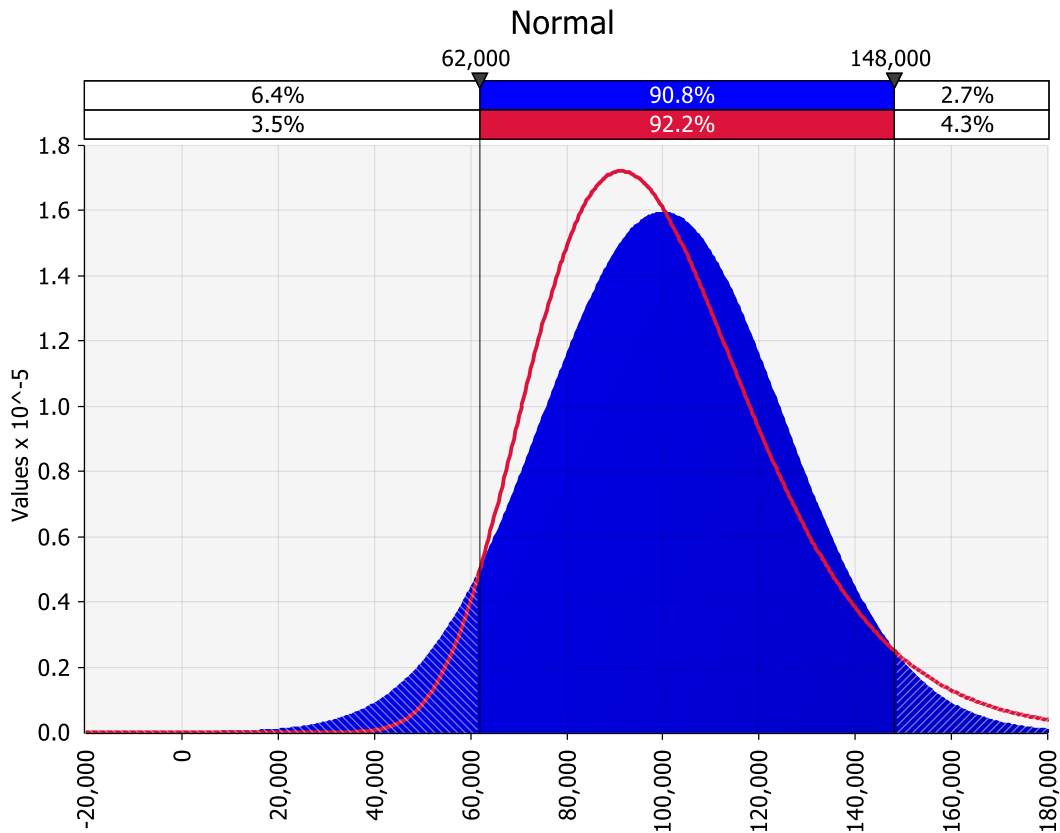
16 Development of accident year weights for 2018 through 2022 with likelihoods
 17 determined by the distribution of loss cost projections for 2009 through 2017
 18 would result in the following accident year weights.

Insuran ce Year	AB-WI	AB-O (I)	AB-O (NI)	BI	CL	CM	PD
2018	5%	5%	8%	17%	38%	15%	41%
2019	6%	11%	0%	15%	17%	15%	12%
2020	38%	11%	12%	18%	6%	3%	13%
2021	36%	44%	76%	34%	3%	8%	27%
2022	15%	28%	3%	15%	35%	59%	7%

19 i) We believe that this is appropriate considering the greater uncertainty associated
 20 with the 2020 estimate relative to the 2019 estimate.

21 j) As a point of clarification, we are suggesting that, based on the Central Limit
 22 Theorem, aggregate claim costs (not individual claims) are normally distributed.

1 In the case of “very extreme values,” we generally agree with the statement.
2 However, in this case, we did not observe “very extreme value” (consistent with
3 the Central Limit Theorem) and the systemic bias is unclear to us. While we agree
4 that larger values may have a higher likelihood than under a right-skewed
5 distribution, some smaller values may also have a higher likelihood due to the
6 compression of the distribution on the left. Below, we present a chart comparing
7 the lognormal (red, right skewed) distribution and normal distribution (blue,
8 symmetric) distributions – both with mean values of 100,000 and standard
9 deviations of 25,000. Changes in likelihood are dependent on the position of the
10 data relative to the crossover points (identified visually as occurring at
11 approximately 62,000 and 148,000).



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13 **RATIONALE FOR REFUSAL TO FULLY ANSWER THE QUESTION:**

1 For parts c) through e), we do not track the accident year weights of filings that we
2 reviewed in a database. Therefore, we would need to review each of the
3 approximately 75 filing that we review annually and construct that database.

4 Even if we were able to do that, the fiscal/accident periods in the filings we review
5 vary, so it is difficult to consistently define "2020" and "2021." For example, some
6 filings use experience periods defined by 12 months ended 30 June and other filings
7 use calendar periods. This complicates the definition of 2020 and 2021.

1 **PUB (CAC)-3**

Part and Chapter:	CAC Manitoba Intervener (Oliver Wyman) Evidence	Page No.:	4.3
PUB Approved Issue No:	11. Claims Forecasting		
Topic:	Claims Trends		
Sub Topic:			

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

4 For the 2023 GRA (in section 3.2 of OW evidence):

5 a) Oliver Wyman had no issue with the weekly indemnity severity model which was
 6 based on an 18 year trend, excluding the last two years.

7 b) Oliver Wyman presented evidence in which it selected a trend period from
 8 accident year 2012 to 2019 for Weekly Indemnity claim frequency.

9 For the 2024 GRA:

10 c) Oliver Wyman does not indicate any issue with MPI’s selected frequency model
 11 which considers observations from 2009 to 2022.

12 d) MPI uses a severity model which considers observations from accident years
 13 2012 to 2022. Oliver Wyman suggests an alternative, as shown in Figure 6, with
 14 the use of accident years 2009 to 2022. The impact of this alternative would be
 15 to reduce the severity trend from 3.96% to 2.96%, and a reduction in the overall
 16 rate indication of -0.33% as per Table 7.

17 **Question:**

- 1 a) Given Oliver Wyman’s recommendation from the 2023 GRA in the use of accident
2 years 2012 to 2019 for the frequency trend, why does it now believe that
3 accident years 2009 to 2011 are predictive?
- 4 b) Given that Oliver Wyman did not take issue with the use of different trend periods
5 in the 2023 GRA for frequency and severity for this coverage, why does it now
6 hold the view that, absent compelling reasons, frequency and severity models
7 should consider the same time period?
- 8 c) If 2012 to 2022 accident years were used for both frequency and severity for
9 this coverage, what would be the indicated trends, and the impact on the overall
10 rate indication? Please assume the use of 20% weights for each of 2018 to 2022
11 for this calculation.
- 12 d) If the frequency trend was based on 2012 to 2022, and the severity trend was
13 based on the last 18 accident years excluding the two most recent, what would
14 be the indicated trends, and the impact on the overall rate indication? Please
15 assume the use of 20% weights for each of 2018 to 2022 for this calculation.

16 **Rationale for Question:**

17 To better understand Oliver Wyman selection of accident years for Weekly Indemnity.

18 **RESPONSE:**

- 19 a) It is difficult to make a direct comparison to our prior review as MPI’s trend and
20 projection methodology has changed significantly between the 2023 and 2024
21 GRA. MPI’s prior trend analysis relied more heavily on judgment and therefore,
22 we focused our 2023 GRA review on the modelled projections/results rather
23 than model design/assumptions.
- 24 b) MPI has adopted a methodology very similar to the approach we use in other
25 Provinces for the 2024 GRA. We appreciate this change in approach as we find
26 it is more robust and makes comparing assumptions and model output easier.

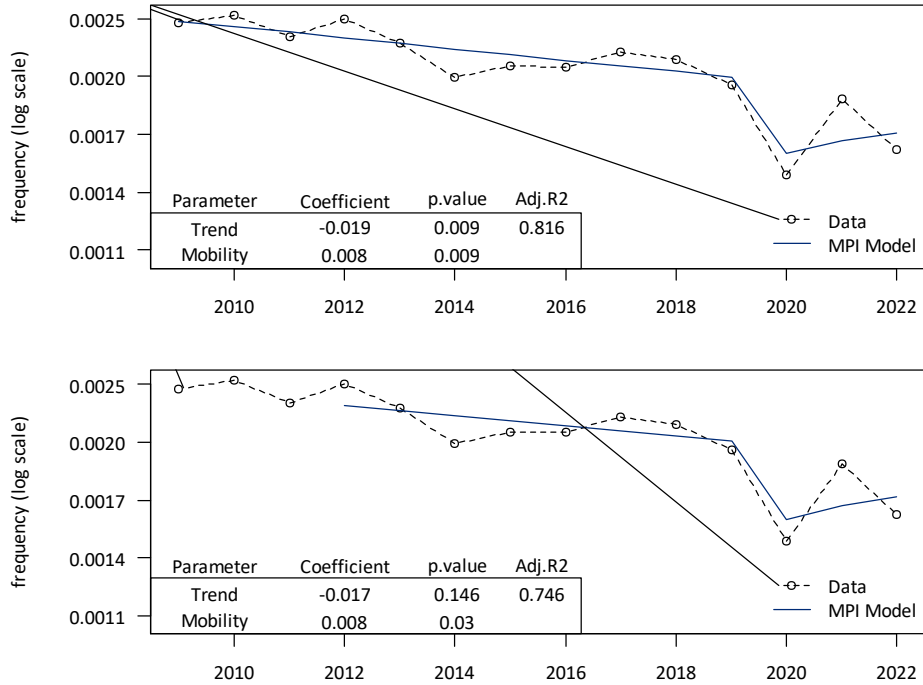
1 We focus our review on the reasonableness of MPI’s selected models and
2 projections.

3 In the 2023 GRA, we found MPI’s frequency model was a poor fit of the historical
4 data and had poor statistical model results (low adjusted R-squared; and
5 insignificant *p*-values). We found that the model would be significantly improved
6 by considering a longer trend period and recommended a model that began with
7 2012.¹ This starting period was selected by default, as we focussed our 2023 GRA
8 review on 10-years of accident year experience (between 2012-2021). This is not
9 to imply that we found the 2009 to 2011 periods were not predictive in our prior
10 review, but that these data may not have been considered at the time. ²

11 In the 2024 GRA, MPI considered a longer trend period and selected a frequency
12 model fit beginning 2009. We found this model was reasonable and therefore did
13 not propose an alternative. As shown in the following figure, MPI’s model is a
14 better fit of the historical experience and has a higher adjusted R-squared value
15 than the model beginning 2012. Although, this model outperformed the alternative
16 model recommended in our prior review (beginning 2012), the indicated frequency
17 trends are not materially different.

¹ 20XX refers to accident year incepting April 1, 20XX

² We do not recall the rationale for limiting our review to 10-years of experience.



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2 c) We find it is common actuarial practice to align the frequency and severity trend
 3 periods in the absence of compelling evidence to avoid introducing bias on the
 4 implied loss cost trend. It is common for material changes in the historical
 5 frequency trend to be accompanied by changes in severity. For example, the
 6 recent increase in thefts across Canada has resulted in a significant increase in
 7 comprehensive frequency, but also increases comprehensive severity as the
 8 percentage of total loss claims increases.

9 We recognize the alignment of frequency and severity trend periods may result in
 10 a worse statistical fit; and it may not be possible to determine specific rationale for
 11 changes in trends. In these cases, it is the responsibility of the actuary to
 12 determine whether the alignment of trend periods is warranted given the inferior
 13 model performance.

14 d) The indicated frequency trend for a model fit beginning 2012 is -1.72% (see above
 15 figure). The indicated severity trend for a model fit beginning 2012 is +3.39%
 16 (MPI selection). We estimate MPI's overall rate indication would increase by

1 approximately 0.06 percentage points if 2012 to 2022 accident years were used for
2 both frequency and severity for this coverage and 20% weights for each of 2018 to
3 2022.

4 e) MPI only includes 14 years of historical frequency and severity experience in its
5 loss trend analysis. Therefore, we are unable to estimate an 18-year severity
6 trend. Please refer to CF Appendix 2 and CF Appendix 3 for the 2009-2022
7 accident year estimates.

8 **RATIONALE FOR REFUSAL TO FULLY ANSWER THE QUESTION:**

9 MPI only includes 14 years of historical frequency and severity experience in its loss
10 trend analysis. Therefore, we are unable to estimate an 18-year severity trend. Please
11 refer to CF Appendix 2 and CF Appendix 3 for the 2009-2022 accident year estimates.

1 **PUB (CAC)-4**

Part and Chapter:	CAC Manitoba Intervener (Oliver Wyman) Evidence	Page No.:	4.4
PUB Approved Issue No:	11. Claims Forecasting		
Topic:	Claims Trending		
Sub Topic:			

2

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

4 For the 2023 GRA,

5 a) MPI (2023 GRA CI.5) selected a frequency trend for Accident Benefits Other
 6 (Indexed) based on accident years 2010 to 2019 and a severity trend based on
 7 the last 18 years, excluding the two most recent.

8 b) Oliver Wyman did not provide any evidence on this coverage.

9 For the 2024 GRA,

10 a) MPI selected a frequency trend based on accident years 2009 to 2022 and a
 11 severity trend based on accident years 2012 to 2022, but excluding accident year
 12 2020. The frequency model shown in Figure 7 has a coefficient of -0.024 and the
 13 severity model has a coefficient of 0.047.

14 b) Oliver Wyman suggested, similar to Weekly Indemnity, that absent compelling
 15 reasons, frequency and severity models should consider the same time period.
 16 Oliver Wyman suggests the use of accident years 2012 to 2022 for both
 17 frequency and severity. The frequency model shown in Figure 9 has a coefficient
 18 of -0.033 and the severity model shown in Figure 9 has a coefficient of -0.056.

19 **Question:**

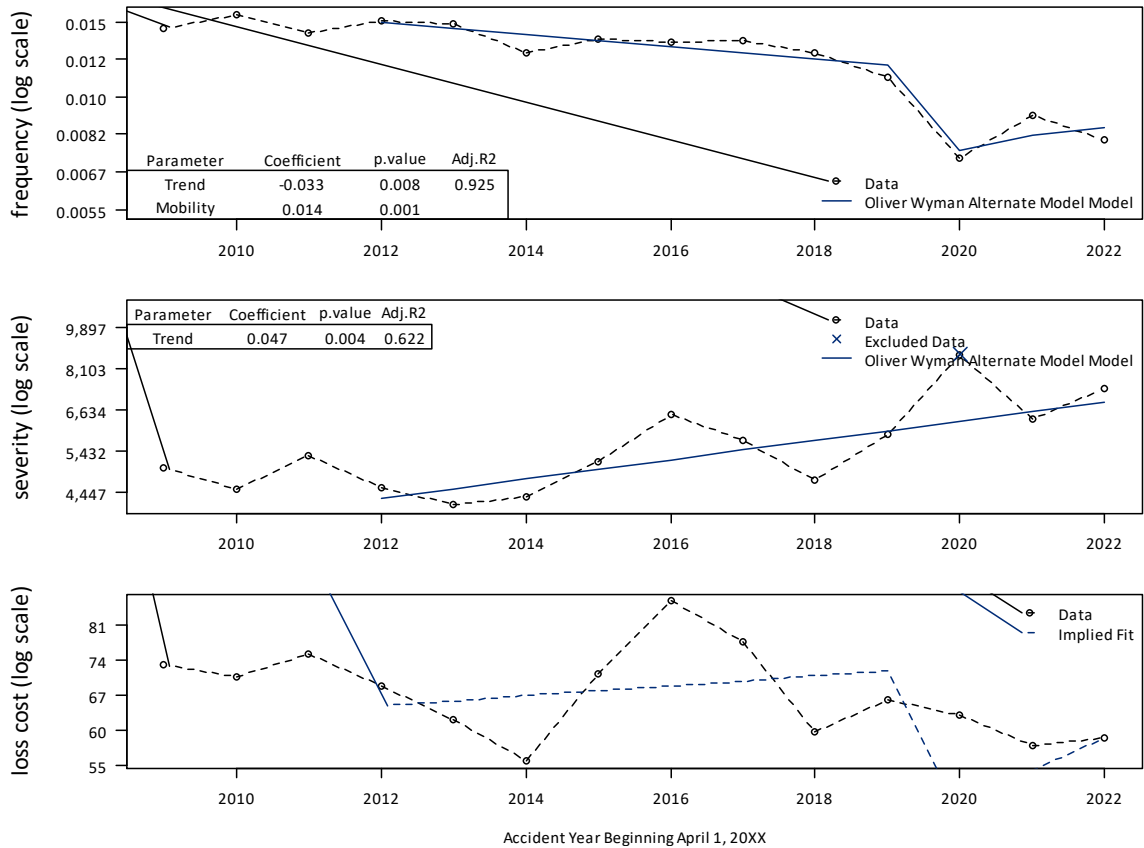
- 1 a) Please confirm that the Oliver Wyman severity model indicates a trend that is
2 0.009 higher than that of the MPI model.
- 3 b) Why did Oliver Wyman not consider the higher severity trend as part of the
4 rate indication?
- 5 c) Would Oliver Wyman agree that a severity model that has a trend that is larger
6 by 0.009 would offset a frequency model that has a trend that is lower by
7 0.009?
- 8 d) What would be the indicated trends, if accident years 2010 to 2022 were used
9 for frequency, and the last 18 accident years, excluding the two most recent,
10 were used for the severity trend, and what would be the impact on the overall
11 rate indication? Please assume the use of 20% weights for each of 2018 to
12 2022 for this calculation.

13 **Rationale for Question:**

14 To better understand accident benefits other indexed trends.

15 **RESPONSE:**

- 16 a) The inclusion of the 2020 severity observation in our alternative severity model
17 was an oversight. Similar to MPI, we consider the 2020 severity observation to
18 be an outlier. Therefore, we find MPI's selected severity model to be
19 reasonable. The following is a corrected version of Figure 9.



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b) As discussed above, the inclusion of the 2020 severity observation in our alternative severity model was an oversight, we find MPI’s selected severity model to be reasonable. Therefore, we do not consider an alternative severity trend in our alternative rate level calculation.

c) We agree with this premise.

d) MPI only includes 14 years of historical frequency and severity experience in its loss trend analysis. Therefore, we are unable to estimate an 18-year severity trend. Please refer to CF Appendix 2 and CF Appendix 3 for the 2009-2022 accident year estimates.

RATIONALE FOR REFUSAL TO FULLY ANSWER THE QUESTION:

- 1 MPI only includes 14 years of historical frequency and severity experience in its loss
- 2 trend analysis. Therefore, we are unable to estimate an 18-year severity trend. Please
- 3 refer to CF Appendix 2 and CF Appendix 3 for the 2009-2022 accident year estimates.

1 **PUB (CAC)-5**

Part and Chapter:	CAC Manitoba Intervener (Oliver Wyman) Evidence	Page No.:	4.5
PUB Approved Issue No:	11. Claims Forecasting		
Topic:	Claims Trends		
Sub Topic:			

2

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

4 Oliver Wyman indicates:

5 We have no issues with MPI’s ABI-O(NI) frequency and severity models. For future
 6 trend, we appreciate MPI’s view of flatter recent frequency experience. However, the
 7 severity experience in that same period is also somewhat flatter. We find that the
 8 increase in frequency trend for the future relative to the past from -4.90% to 0.0% to
 9 be too significant. We accept that some tempering may be appropriate and suggest a
 10 50% tempering from -4.90% to -2.45%.

11 Oliver Wyman reviewed MPI’s selected frequency trends and either had no issue with
 12 them, or selected alternatives, by coverage are as follows:

13 Accident Benefits – Weekly Indemnity -1.9% (Figure 6)

14 Accident Benefits – Other (Indexed) -3.3% (Figure 9)

15 Accident Benefit – Other (non-indexed) -4.9% past, -2.45% future

16 Bodily Injury -2.7% (Figure 12)

17 Collision -1.7% (Figure 16)

1 Property Damage (loss of use) -2.9% (Figure 22)

2 Property Damage (third party deductible transfer) -0.5% (Figure 25)

3 **Question:**

4 a) Given the negative trends for all of the above coverages that are related to
5 vehicle accidents, would Oliver Wyman agree that the use of a 0.0% future
6 frequency trend for Accident Benefits Other (non-indexed) appears unduly
7 conservative?

8 b) Why does Oliver Wyman believe that the use of 50% of the past trend is an
9 appropriate selection in this circumstance?

10 c) Given the above frequency trends, what would Oliver Wyman consider to be a
11 reasonable range for a selected future frequency trend for Accident Benefits
12 Other (non-indexed)?

13 **Rationale for Question:**

14 To understand the selection of a shorter time frame for trending.

15 **RESPONSE:**

16 a) Yes, we agree that the use of a 0.0% future frequency trend for accident
17 benefits other (non-indexed) appears unduly conservative considering the
18 historical negative frequency trend observed for accident benefits-other (non-
19 indexed) as well as the other coverages.

20 b) This tempering is primarily based on judgement and considers the flattening
21 observed in the frequency data between 2019 and 2022.

22 c) We consider -2.45% to -4.90% to be a reasonable range for the selected future
23 frequency trend for Accident Benefits Other (non-indexed).

1 RATIONALE FOR REFUSAL TO FULLY ANSWER THE QUESTION:

1 **PUB (CAC)-6**

Part and Chapter:	CAC Manitoba Intervener (Oliver Wyman) Evidence	Page No.:	4.7
PUB Approved Issue No:	11. Claims Forecasting		
Topic:	Claims Trends		
Sub Topic:			

2

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

4 For Collision, MPI selects a different severity trend between 2020 to 2022 based on a
5 two-parameter model fit to three data points. Oliver considers this to be unusual and
6 severely limits the predictive power of the regression. Oliver Wyman finds a single model
7 that considers additional parameters to isolate the impact of inflation to be a more
8 reasonable approach.

9 **Question:**

- 10 a) Could Oliver Wyman please confirm that the approach used by MPI for Collision
11 severity, as shown in Figure 14, has MPI Model 2 starting point not aligned with
12 MPI Model 1 ending point (at accident year 2020) whereas in Figure 16, at the
13 Trend change point of 2020, the Oliver Wyman model does not have this
14 misalignment issue?
- 15 b) Does Oliver Wyman agree that this misalignment potentially overstates the
16 overall past trend?
- 17 c) Could Oliver Wyman please confirm that the impact of this misalignment results
18 in a slightly lower loss trend of +9.59%, rather than the 10.68% selected by
19 MPI, and it would be applied for one year to accident year 2021, and two years
20 for accident years 2020 and prior?

1 d) Could Oliver Wyman please determine the impact of the above change in trend
2 on the overall rate indication? Please assume the use of 20% weights for each
3 of 2018 to 2022 for this calculation.

4 **Rationale for Question:**

5 To better understand OW's view on the MPI collision severity model.

6 **RESPONSE:**

7 a) We confirm that MPI's model 2 prediction for 2020 does not align with MPI's
8 model 1 prediction. The alternative model we propose does not suffer from this
9 misalignment issue.

10 b) Yes, we agree that this misalignment issue potentially overstates the overall
11 past trend rate.

12 c) We agree that the trend rate would be applied for one additional period for 2020,
13 as compared to 2021; however the absolute length of the application (listed as
14 two years and one year in the question) would depend on the context. For
15 example if we trending to an accident year 2024 cost level, then the lengths of
16 the application would be 3 years and 4 years for 2021 and 2020, respectively.

17 d) We estimate MPI's overall rate indication would decrease by approximately 1.87
18 percentage points using our alternative loss trend model for collision and 20%
19 weights for each of 2018 to 2022.

20 **RATIONALE FOR REFUSAL TO FULLY ANSWER THE QUESTION:**

1 **PUB (CAC)-7**

Part and Chapter:	CAC Manitoba Intervener (Oliver Wyman) Evidence	Page No.:	4.8
PUB Approved Issue No:	11. Claims Forecasting		
Topic:	Claims Trending		
Sub Topic:			

2

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

4 MPI removes historical hail claims from its comprehensive loss trend data and applies a
5 separate loading factor to the loss cost forecast to account for expected future hail
6 events. MPI's selected hail adjustment factor is based on the average experience
7 between 2017 and 2022, as implied by its historical data.

8 **Question:**

9 Does Oliver Wyman find the use of a six-year experience period for the hail
10 adjustment factor to be appropriate?

11 **Rationale for Question:**

12 To better understand Oliver Wyman's view on hail.

13 **RESPONSE:**

14 We agree with MPI's approach of excluding hail claims from its comprehensive loss
15 experience and applying a separate hail load based on a long-term average. It is
16 common practice for private insurers to use longer-term averages to support these
17 loads.

18 **RATIONALE FOR REFUSAL TO FULLY ANSWER THE QUESTION:**

1 **PUB (CAC)-8**

Part and Chapter:	CAC Manitoba Intervener (Oliver Wyman) Evidence	Page No.:	4.9
PUB Approved Issue No:	11. Claims Forecasting		
Topic:	Claims Trending		
Sub Topic:			

2

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

4 In the 2023 GRA for Property Damage loss of use

5 a) MPI used a five year linear trend of the 2015-2019 accident years, and forecasted
 6 a decline of 2.98%.

7 b) Oliver Wyman had no issue with MPI’s frequency model, as per section 5.3 of
 8 the Intervenor Evidence

9 c) Oliver Wyman proposed a severity trend of 0.0%

10 In the 2024 GRA

11 a) MPI used accident years 2010 to 2022 for frequency, with a mobility adjustment,
 12 and selected a trend of -2.2% as shown in Figure 20.

13 b) MPI selects 2 models for this coverage, similar to the approach for Collision, and
 14 as shown in Figure 20, the two Models are not aligned at accident year 2020.

15 c) Oliver Wyman selects an alternative frequency model, using accident years 2013
 16 to 2022, with a mobility adjustment, and selected an alternative trend of -2.9%.

1 d) Oliver Wyman selects an alternative severity model, using accident years 2013
2 to 2022, with a trend change at 2020, although when looking at Figure 22, it
3 appears to have two changes in the trend, first from 2019 to 2020, and then
4 from 2020 onwards.

5 **Question:**

6 a) Could Oliver Wyman please indicate if there is another parameter used in the
7 severity model, and if so, what is it for?

8 b) If Oliver Wyman only used a two parameter model for severity, similar to
9 Collision, for this coverage, still using accident years 2013 to 2022, what would
10 be the indicated trend, and what would be the impact on the rate indication?
11 Please assume the use of 20% weights for each of 2018 to 2022 for this
12 calculation.

13 c) If Oliver Wyman used the 2010 to 2022 accident year period for severity, similar
14 to MPI, but with a two parameter model, what would be the indicated trend, and
15 what would be the impact on the rate indication? Please assume the use of 20%
16 weights for each of 2018 to 2022 for this calculation.

17 d) Why does Oliver Wyman believe a -4.9% trend for severity from 2013 to 2019
18 is appropriate? What would drive this level of decrease?

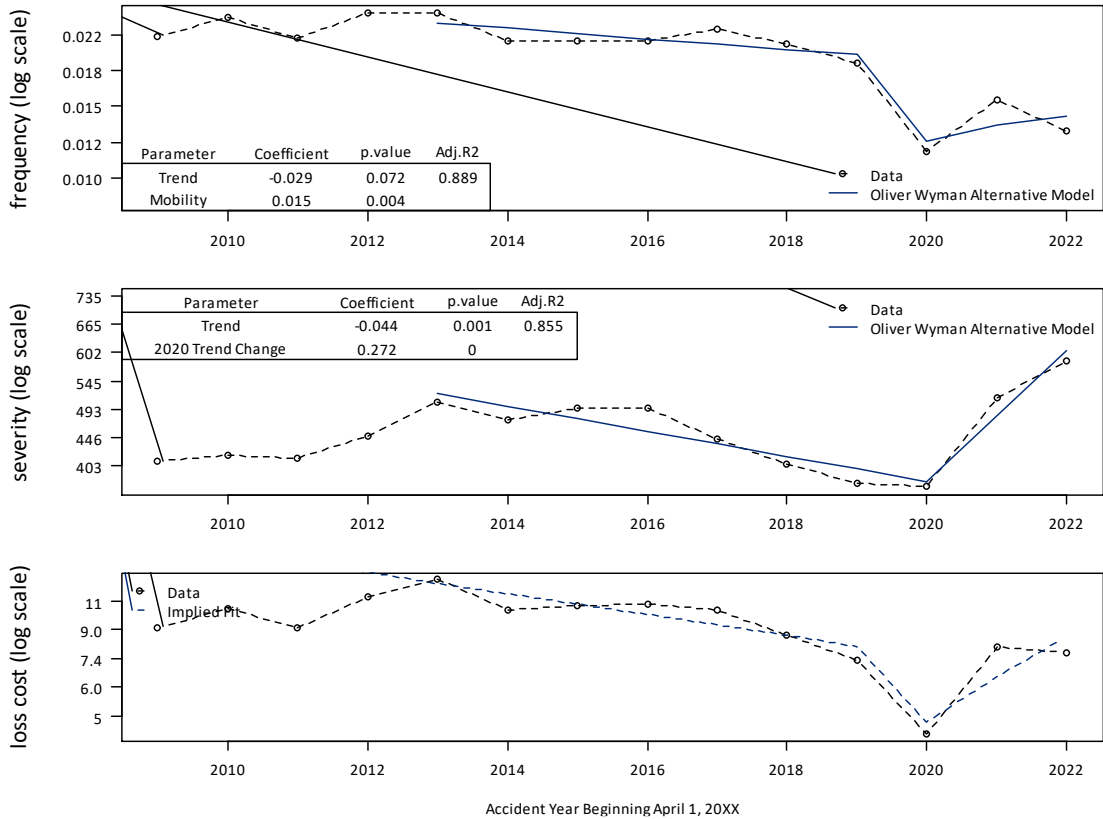
19 **Rationale for Question:**

20 To better understand Oliver Wyman's view on trends for this coverage.

21 **RESPONSE:**

22 a) We have identified an error in our design matrix impacting the alternative
23 severity model for PD third party loss of use. This error has been corrected in
24 the following figure. The indicated past loss cost trend associated with our

1 corrected model is -7.0%³ through 2020 and +22.0%⁴ thereafter. Correcting this
 2 issue changes our alternative overall rate indication from -3.63% (OW Evidence
 3 Table 6) to -3.61%.

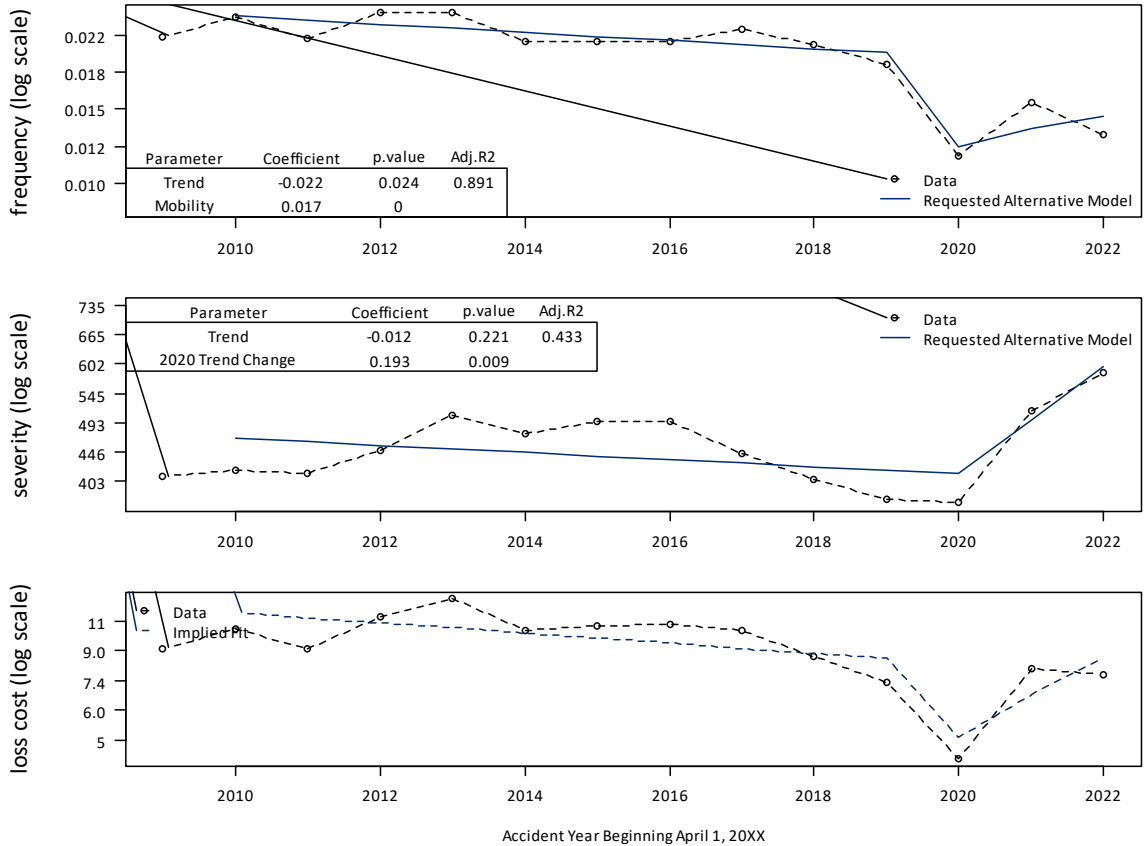


4

5 b) We estimate using the corrected model above and 20% weights for each of 2018
 6 through 2022 would reduce MPI’s overall rate level indication by 0.08 percentage
 7 points.

³ -7.0% = $\exp(-0.029 - 0.044) - 1$
⁴ +22.1% = $\exp(-0.029 - 0.044 + 0.272) - 1$

1 c) We present the requested model in the following figure. The indicated past loss
 2 cost trend associated with our corrected model is -3.3%⁵ through 2020 and
 3 +17.2%⁶ thereafter.



4

5 We estimate using the requested model and 20% weights for each of 2018
 6 through 2022 would reduce MPI’s overall rate level indication by 0.09 percentage
 7 points.

8 d) Claims severity for PD loss of use is dependent upon multiple factors.
 9 Unfortunately, we do not have the data to investigate potential claim cost drivers
 10 for this coverage.

⁵ -3.3% = $\exp(-0.022 - 0.012) - 1$
⁶ +17.2% = $\exp(-0.029 - 0.044 + 0.193) - 1$

1 **RATIONALE FOR REFUSAL TO FULLY ANSWER THE QUESTION:**

- 2 We do not have the data to investigate potential claim cost drivers for this coverage.

1 **PUB (CAC)-9**

Part and Chapter:	CAC Manitoba Intervener (Oliver Wyman) Evidence	Page No.:	4.10
PUB Approved Issue No:	11. Claims Forecasting		
Topic:	Claims Trending		
Sub Topic:			

2

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

4 In section 4.7 Oliver Wyman selects a collision severity trend of -1.7%.

5 Figure 23 shows MPI selected frequency trend for Property Damage third party
6 deductible to be -1.9%7 Figure 25 shows Oliver Wyman's selected frequency trend for Property Damage third
8 party deductible transfer to be -0.5%9 **Question:**10 Why does Oliver Wyman believe there should be a significantly less negative trend for
11 Property Damage Third Party Deductible Transfer than there is for Collision? What would
12 cause this difference?13 **Rationale for Question:**

14 To better understand Oliver Wyman's view on trends for this coverage.

15 **RESPONSE:**16 We do not have the data to investigate differences in claim cost drivers for these
17 coverages. We employ a data-based approach to modelling trends.

1 **RATIONALE FOR REFUSAL TO FULLY ANSWER THE QUESTION:**

- 2 We do not have the data to investigate potential claim cost drivers for these
3 coverages.

1 **PUB (CAC)-10**

Part and Chapter:	CAC Manitoba Intervener (Oliver Wyman) Evidence	Page No.:	4.11
PUB Approved Issue No:	11. Claims Forecasting		
Topic:	Claims Trending		
Sub Topic:			

2

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

4 In the 2023 GRA, MPI used a five year trend period for frequency and a 15 year trend
5 period for severity for Property Damage Other. In Section 6.3 of intervenor evidence,
6 Oliver Wyman indicated no issues with either selection.

7 In Section 4.11, Figure 26 shows MPIs indicated frequency trend of -2%. Oliver Wyman
8 recommend MPI use the same time period for both frequency and severity models to
9 reduce bias and maintain consistency. In Figure 28, they present their alternative model
10 for frequency which is fit to accident years 2009 to 2022, which results in a -1.29%
11 frequency trend.

12 **Question:**

13 Please explain why Oliver Wyman now recommends the use of the same time periods
14 when it did not take issue with the use of different time periods in the 2023 GRA.

15 **Rationale for Question:**

16 To better understand Oliver Wyman's view on trends for this coverage.

17 **RESPONSE:**

1 It is difficult to make a direct comparison to our prior review as MPI's trend and
2 projection methodology has changed significantly between the 2023 and 2024 GRA.
3 MPI's prior trend analysis relied more heavily on judgment and therefore, we focused
4 our 2023 GRA review on the modelled projections/results rather than model
5 design/assumptions.

6 MPI has adopted a methodology very similar to the approach we use in other
7 Provinces for the 2024 GRA. We appreciate this change in approach as we find it is
8 more robust and makes comparing assumptions and model output easier and more
9 understandable.

10 **RATIONALE FOR REFUSAL TO FULLY ANSWER THE QUESTION:**

1 **PUB (CAC)-11**

Part and Chapter:	An Independent Commentary on Technology at MPI	Page No.:	7
PUB Approved Issue No:	15. Information Technology (IT) benchmarking and value Management		
Topic:	5.1.1 Benchmarking		
Sub Topic:			

2

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

4 *"Considering MPI's absence of competitive pressures and its assured market,*
5 *benchmarking its IT investments against the highly competitive private P&C sector is*
6 *inappropriate."*

7 **Question:**

8 Please provide elaborate further to support the statement noting benchmarking IT
9 investments in the highly competitive private P&C sector is inappropriate for MPI.

10 **Rationale for Question:**

11 To further understand author's benchmarking perspective.

12 **RESPONSE:**

13 The primary benefit of benchmarking data is to provide a measurement against a
14 group of peers. In terms of MPI, the issue is to determine what is their appropriate
15 peer group. In the arena of Technology amongst the P&C Insurance industry, one of
16 the primary drivers of cost is the need to innovate. Market innovators spend
17 considerably more money in order to gain competitive advantage against their
18 competitors. This is particularly truly in the Insurance industry which is highly
19 competitive. Additionally, this competitive factor drives investment to gain "first

1 mover” advantage – that is being the first to enter the market with new innovations.
2 MPI is not required to participate in these costly adventures due to it’s protected
3 position in the market. As such, it can wait for technology innovations to “mature”. In
4 technology, waiting for innovations to mature allows cost savings due to economies of
5 scale, market saturation, new software vendors offering competition for similar
6 products, and reduced costs of production (for example, software vendors, which are
7 one of the primary costs to an organization like MPI, have the unique characteristic
8 that the direct cost of producing additional copies of software is minimal once the
9 software has been developed by the vendor. This differs from physical goods, where
10 each additional unit has a direct production cost). After recovering development costs,
11 software companies have more flexibility in pricing. The P&C industry does not operate
12 as a monopoly in most jurisdictions, and in fact is characterized as a competitive
13 landscape where multiple companies are competing for market share.

14 Returning to the purpose of a benchmark, the above factors makes the P&C insurance
15 industry questionable for MPI as a benchmark.

16 **RATIONALE FOR REFUSAL TO FULLY ANSWER THE QUESTION:**

1 **PUB (CAC)-12**

Part and Chapter:	An Independent Commentary on Technology at MPI	Page No.:	7
PUB Approved Issue No:	15. Information Technology (IT) benchmarking and value Management		
Topic:			
Sub Topic:			

2

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

4 *"However, ensuring the selected benchmarks are relevant and customized to MPI's*
5 *specific operational environment is crucial. Choosing an inapt "peer group" could skew*
6 *the benchmarks, potentially leading to misinformation. Although MPI primarily operates*
7 *as a Property and Casualty (P&C) service provider, its unique status as a Crown*
8 *Corporation, monopolistic nature, and substantial legislative protections to differentiate*
9 *it. This uniqueness indicates that many benchmark standards from the broader*
10 *insurance industry might not be apt. For example, in the intensely competitive P&C*
11 *insurance sector, IT investments are often strategic, aiming to surpass competitors and*
12 *capture a more substantial market share."*

13 **Question:**

14 a) Please indicate whether there are additional qualities of MPI other than status of
15 Crown corporation, monopolistic nature, and substantial legislative protections
16 that differentiate MPI as an insurer.

17

18 b) If additional qualities exist, please explain each.

19

20 **Rationale for Question:**

21 To further understand author's benchmarking perspective.

1 **RESPONSE:**

2 a) The major factors are the monopoly status, crown corporation, and legislated
3 liabilities protections. However, other qualities include, while less impactful are:

4 (1) MPI's small size versus other P&C insurer's;

5 (2) Lower operating costs such as salary, rent, and utilities due to MPI's
6 location;

7 (3) Protection from Insurtech startups; and

8 (4) Avoidance of blockchain technologies and their investment costs;

9 b) In terms of the impact of each of the above:

10 (5) Size – MPI's size in terms of revenue, employee count, and claims volume
11 changes the type of system investments which are viable. MPI fits into
12 more of a small to mid-size corporation, and as such would be appropriate
13 to benchmark technology investments in this realm;

14 (6) Lower operating costs – MPI's location in Manitoba provides it with some
15 significant cost savings in terms of salary costs, rent and utilities. These
16 factors are not insignificant. In my experience, for example, technology
17 wages tend to be 10% less than those of markets such as BC, Alberta and
18 Ontario.

19 (7) Protection from Insurtech startups –allowing substantially lower costs
20 which results in lower premiums. In order to compete against these
21 organizations, the competitive P&C industry is expending funds to offset
22 these competitive threats. MPI is protected from this threat. (Insurtechs
23 are business ventures within the insurance industry that look to leverage
24 technology to disrupt the insurance process - similar to what Uber did to
25 the taxi industry).

1 (8) Blockchain - Some insurers are exploring blockchain for its potential to
2 streamline operations, reduce fraud, and improve transparency.
3 Implementing these solutions is still in the early stages and requires
4 research and development expenditures.

5 **RATIONALE FOR REFUSAL TO FULLY ANSWER THE QUESTION:**

1 **PUB (CAC)-13**

Part and Chapter:	An Independent Commentary on Technology at MPI	Page No.:	8
PUB Approved Issue No:	20. Project Nova		
Topic:	5.1.1 Benchmarking		

2

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

4 *"While MPI has performed benchmarking in general against SGI and ICBC, technology-*
5 *specific benchmarking is required. For example, the AON Benchmarking peer group is*
6 *largely outside the Public Sector peer group. Further AON's technology data is limited*
7 *to financial expenditures and headcount. Gartner's benchmarking is far more*
8 *appropriate, but the peer group used for MPI is "insurance industry peers" rather than*
9 *the public sector. Gartner, who has a large public sector client base, has substantial*
10 *data on Public Sector peers and this data would be insightful."*

11 **Question:**

12 Please elaborate further on why usage of AON to assess technology-specific
13 benchmarking is not an appropriate assessment for MPI.

14 **Rationale for Question:**

15 To further understand author's benchmarking perspective.

16 **RESPONSE:**

17 AON's data would be more useful if it included crown corporations as well as public
18 sector organizations.

1 Further, AON’s analysis is of high quality and focused on financial ratios, including
2 percentages of expenses versus premiums, expenses per FTE. These are useful
3 particularly if an appropriate peer group is chosen.

4 However, technology expenditures are a “hot button” for most Board and Executive
5 oversight, and as such considerable industry effort has been undertaken to provide
6 better insight into what should be measured with a specific focus on an efficient and
7 effective technology expenditure/investment.

8 Technology benchmarking services help organizations evaluate their technological
9 capabilities, processes, and performances against best practices or against other
10 industry competitors. Several companies and consulting firms offer these services
11 across various sectors. Here are some prominent providers:

12 a) Gartner: One of the leading research and advisory firms, Gartner offers
13 technology-related insights, including benchmarking and best practices, across
14 a variety of IT areas.

15 b) Forrester Research: This global research and advisory firm provides
16 benchmarking services in areas like IT, marketing, and customer experience.

17 c) IDC (International Data Corporation): IDC offers market research, analysis,
18 and advisory services for the IT, telecommunications, and consumer
19 technology markets.

20 d) Big 4 Consulting firms (Deloitte, PWC, KPMG, EY) - Through their various
21 technology and consulting arms, these firms offer benchmarking services to
22 assess technological performance and maturity.

23 When selecting a benchmarking service, firms typically consider their specific industry,
24 the particular technological area they want to benchmark, and the depth of insight
25 they require. Different providers have unique strengths depending on these factors.

1 Benchmarking is the practice of comparing a company's processes, performance
2 metrics, or strategies to industry best practices from other companies or to standards.
3 Both technology benchmarking and industry benchmarking aim to improve
4 performance by identifying gaps and areas for improvement. AON's benchmarking is
5 general by design, whereas Gartner et al are technology specific benchmarking. Their
6 focuses and methodologies differ in several ways:

7 1. Scope of Focus

8 - Technology Benchmarking: This specifically focuses on the organization's
9 technological tools, systems, practices, and solutions. It evaluates aspects such as IT
10 infrastructure, software efficiency, system downtimes, security measures, IT costs,
11 and other technology-related metrics.

12 - General Industry Benchmarking: This has a broader scope and might encompass a
13 variety of functions within a company, such as finance, human resources, production,
14 sales, or marketing.

15 2. Purpose

16 - Technology Benchmarking: The goal is to identify technological efficiencies and
17 inefficiencies, ascertain the effectiveness of tech investments, and ensure that
18 technological systems are in line with industry standards or best practices.

19 - General Industry Benchmarking: The purpose is to get a comprehensive
20 understanding of a company's overall operational efficiency, effectiveness, and
21 competitiveness in various domains within the industry.

22 3. Data Points:

23 - Technology Benchmarking: Data points might include uptime, system response
24 times, software license costs, cybersecurity incidents, IT staff-to-employee ratios, etc.

1 - General Industry Benchmarking: Metrics might cover a wide range of operational
2 data, such as production rates, customer satisfaction scores, average time to hire for
3 a position, or inventory turnover rates.

4 4. Stakeholders Involved:

5 - Technology Benchmarking: Typically involves IT management, system
6 administrators, CTOs, or other technology-focused roles within a company.

7 - General Industry Benchmarking: Might involve various department heads,
8 managers, and executives from across the organization, depending on the areas being
9 benchmarked.

10 5. Sources of Information:

11 - Technology Benchmarking: Tech-focused industry reports, IT surveys, software
12 and hardware vendor data, tech industry forums, etc.

13 - General Industry Benchmarking: Industry associations, general business
14 publications, cross-industry surveys, specialized benchmarking firms, etc.

15 6. End Goals:

16 - Technology Benchmarking: Improved IT efficiency, better ROI on tech
17 investments, enhanced cybersecurity, reduced downtimes, etc.

18 - General Industry Benchmarking: Improved overall business processes, increased
19 profitability, better customer satisfaction, optimized workforce management, etc.

20 In essence, while both types of benchmarking aim to improve business performance,
21 technology benchmarking zeros in on the technological aspect of a business, whereas
22 general industry benchmarking provides a broader view of business operations and
23 strategies.

1 RATIONALE FOR REFUSAL TO FULLY ANSWER THE QUESTION:

1 **PUB (CAC)-14**

Part and Chapter:	An Independent Commentary on Technology at MPI	Page No.:	8
PUB Approved Issue No:	20. Project Nova		
Topic:	5.1.2.1 Tendering of Contract		
Sub Topic:	McKinsey Engagement		

2

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

4 *"By examining the materials from the correspondence between the former CEO*
5 *Herbelin and McKinsey, the resulting work proposed by McKinsey significantly diverged*
6 *from the initial MPI leadership specifications."*

7

8 **Question:**

9 a) Please elaborate to further support the observation whereby the resulting work
10 proposed by McKinsey significantly diverged from the initial MPI leadership
11 specifications.

12 b) Please elaborate on whether the author has observed similar issues pertaining
13 to contracts for other reviewed MPI vendors.

14 **Rationale for Question:**

15 To understand author's perspective on usage and scope of McKinsey.

16 **RESPONSE:**

17 The author's observation was informed through reviewing the materials shared in
18 2024 GRA Round 2 Information Requests, CAC (MPI) CI 2-4(a) Appendix 1. In reading
19 through the sequence of email exchanges and documents shared, as well as my

1 experience with clients in similar situations, I was very surprised and impressed that
2 MPI had developed a set of specifications for McKinsey that seemed quite appropriate
3 for the status of Nova and while missing one element (requesting the consultant to
4 investigate mechanisms to return the Nova to an investment that met the original
5 financial criteria), looked quite complete(Ibid, Page 177 to 179). However, the
6 resulting proposal from McKinsey deviated from the
7 specifications(2024_GRA_Confidential_eBook__McKinsey_Protected, Pages 1-29.
8 While I was not privy to the discussions that resulted in the contract with McKinsey, as
9 a long-time consultant, I have seen time and time again situations where the client, in
10 this case MPI, does not stick to their requirements, and moves to the work proposed
11 by the Consultants. Sometimes this occurs as a result of a well-vetted and informed
12 process, but too often it is a result of influence by the Consultant. To avoid this, many
13 organizations use tenders, with written specifications, as it forces Vendors to reply to
14 the stated needs. The interaction with McKinsey lacked the tendering process and the
15 rigour it enforces.

16 In terms of other vendors and their interaction with MPI, my scope of work is limited
17 to the materials shared through the GRA2024 process. However, I have worked with
18 MPI over the years, and can offer that in general where they use a tendered process,
19 they appear to be able to engage suppliers consistent with MPI's original
20 requirements.

21 **RATIONALE FOR REFUSAL TO FULLY ANSWER THE QUESTION:**

1 **PUB (CAC)-15**

Part and Chapter:	An Independent Commentary on Technology at MPI	Page No.:	9
PUB Approved Issue No:	20. Project Nova		
Topic:	NPV & Payback Framework Usage		
Sub Topic:	5.1.2.3 The use of Financial Measures as part of the decision-making process		

2

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

4 *"Examining the development of Nova, it's evident that the original decision-making*
5 *incorporated the expected rigor, using both Net Present Value and Payback calculations*
6 *as justifications. However, as Nova progressed, MPI recognized that it no longer aligned*
7 *with the standard NPV and Payback criteria."*

8 MPI has selected SAFe delivery framework for Project Nova.

9 **Question:**

10 a) Please indicate whether the author has observed other organizations
11 undertaking projects of the size of Project Nova using SAFe as an alternate
12 framework compared to business cases, standard NPV and Payback criteria.

13 b) Please note and state rationale on whether SAFe should continue to be utilized
14 as the core delivery framework for Project Nova.

15 **Rationale for Question:**

16 To understand author's perspective on appropriate delivery framework for Project
17 Nova.

1 RESPONSE:

2 a) SAFe was introduced as a structured approach for scaling agile projects in the
3 industry in 2011, and provides a framework for implementing agile at an
4 enterprise level. One approach for implementing SAFe is to implement an “all in”
5 approach. While this has the benefit of implementing the methodology as a whole
6 and quickly, in my experience this is an aggressive approach.

7 In terms of the SAFe, it does provide an Economic Framework which can include
8 parameters such as NPV and Payback. Further each organization that implements
9 SAFe can, and should, adopt the framework to be appropriate to their own
10 organizational needs. Looking specifically at Nova, I would have expected that as
11 the project began with a NPV and Payback financial analysis, this would have
12 continued throughout the initiative. The use of SAFe for initiatives the size of Nova,
13 I have only observed these in very large corporations, primarily in the Fortune500.
14 However, it should be noted that SAFe is an implementation of the field of
15 technology around the concept of agile practises, which SAFe uses, is widely used
16 across the world.

17 b) While SAFe is specifically designed to address the challenges of scaling Agile
18 practices to larger enterprises and portfolios of projects, using it successfully
19 depends on several factors including:

20 (1) Culture and Buy-in: Implementing SAFe requires a cultural shift and
21 buy-in from all levels of the organization, from executives to individual
22 contributors. MPI has to be ready for this shift throughout the
23 organization, not just in the technology team.

24 (2) Existing Agile Maturity: SAFe is most effective when teams already have
25 some experience with Agile practices. I am not able to assess this for
26 MPI, but to be successful, significant previous experience with Agile
27 through using Scrum or Kanban at the team level would be essential
28 prior to scaling up to SAFe.

1 (3) Training and Coaching: Properly implementing SAFe requires
2 understanding its principles and practices deeply. This often means
3 investing in training and potentially bringing in experienced coaches to
4 guide the transformation. Factors such as turn-over and difficulty
5 securing staff make this a particular challenge for MPI from what I have
6 read in the GRA materials.

7 (4) Flexibility and Adaptation: While SAFe provides a comprehensive
8 framework, it's essential to adapt it to the organization's unique needs.
9 Organizations that treat SAFe as a strict set of rules struggle more than
10 those who use it as a guideline and adjust as necessary.

11 In conclusion, MPI can adopt SAFe to meet its unique needs. However, it is a big
12 change and challenge for MPI given the above factors. It is critical that MPI leadership
13 ensure that the decision to use SAFe, or any framework, is driven by actual business
14 and project needs rather than simply following a trend. My concern is giving the sheer
15 amount of change that Nova is introducing to MPI, impacting almost every core
16 system at MPI, choosing to adapt SAFe at this time is risky, and difficult on the staff.

17 **RATIONALE FOR REFUSAL TO FULLY ANSWER THE QUESTION:**

1 **PUB (CAC)-16**

Part and Chapter:	An Independent Commentary on Technology at MPI	Page No.:	11
PUB Approved Issue No:	20. Project Nova		
Topic:	MPI Staffing Competency Assessment		
Sub Topic:	5.2 Experience of MPI and the Challenge of Similar Initiatives		

2

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

4 *"While MPI undoubtedly employs competent and well-trained personnel, they lack the*
5 *experience needed to navigate sophisticated initiatives like Nova."*

6 **Question:**

7 Please elaborate on the reasons why the author is of the view that MPI lacks the
8 experience needed to navigate sophisticated initiatives like Nova.

9 **Rationale for Question:**

10 To clarify author's statement pertaining to MPI staff competency for Project Nova.

11 **RESPONSE:**

12 My commentary is based on my experience which working with large initiatives like
13 Nova. In addition, in the 2023 GRA I PUB(MPI) 1-1(c) Appendix 3 at page 24 of 31,
14 where MPI's Board of Directors Technology Committee states: "Throughout the history
15 of Project Nova, MPI, recognized that it did not have the internal expertise and that no
16 single external consultant had the expertise to successfully implement a
17 transformational project of the complexity presented by this project. It has engaged

1 the services of industry experts to assist in providing advice on how best to carry out
2 this project."

3 Initiatives of this size are difficult, under the best circumstances, to implement
4 successfully. To be successful, the leadership and team need to have significant
5 experience with projects of similar size and scope. My observation in regard to MPI is
6 that their staff and teams are experienced and skilled, but have not done a Nova scale
7 project at MPI. I believe this to be the largest initiative ever undertaken at MPI. The
8 decision by MPI to take on the role of "general contractor" is troublesome. To be
9 successful, the general contractor needs to have deep experience with the projects
10 being overseen. MPI and its staff are not experienced or experts in many of the
11 systems they are implementing, as they are new to MPI. In addition, MPI's expertise
12 lies in administering Insurance services, not in implementing large, complex projects.
13 To be successful, MPI would need staff deeply experienced with the new systems
14 being implemented.

15 **RATIONALE FOR REFUSAL TO FULLY ANSWER THE QUESTION:**

1 **PUB (CAC)-17**

Part and Chapter:	An Independent Commentary on Technology at MPI	Page No.:	13
PUB Approved Issue No:	20. Project Nova		
Topic:	Project Nova Scope		
Sub Topic:	5.2 Experience of MPI and the Challenge of Similar Initiatives		

2

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

4 *"Standish consistently reports that only about 31% of large-scale projects succeed.*
5 *The success rate drops dramatically to 15% for projects that are both large and*
6 *intricate."*

7

8 **Question:**

9 Please elaborate on the definition of "succeeded" used in the context of the Standish
10 report.

11 **Rationale for Question:**

12 To understand author's perspective for comparative projects.

13 **RESPONSE:**

14 The Standish Group is well-known for its CHAOS Reports, which provide research into
15 the state of software development projects, including success rates, challenges, and
16 best practices. The Standish Group's CHAOS Reports classify projects into three
17 categories: Successful, Challenged, and Failed.

1 According to the Standish Group's criteria a Successful Project is one which is
2 completed on-time, on-budget, and with all the features and functions as initially
3 specified.

4 It is helpful to also consider the other two types of projects as well.

5 1) A Challenged Project: A project is considered challenged if it is completed and
6 operational but over-budget, over the time estimate, and offers fewer features
7 and functions than originally specified.

8 2) A Failed Project: A project is labeled as failed if it is canceled at any point
9 during the development process or if it is completed but never used.

10 The Standish Group's criteria provide a clear, measurable way to categorize projects
11 for the sake of their research. Over the years, their reports have provided valuable
12 insights into the factors that influence project success and failure.

13 Looking at MPI, Nova would currently appear to be heading to a challenged project as
14 costs have escalated, and R1 and R2 releases include less features than originally
15 planned.

16 **RATIONALE FOR REFUSAL TO FULLY ANSWER THE QUESTION:**

1 **PUB (CAC)-18**

Part and Chapter:	An Independent Commentary on Technology at MPI	Page No.:	14-15
PUB Approved Issue No:	20. Project Nova		
Topic:	Project Nova Scope		
Sub Topic:	5.5.2 Shift from Prudent Investment		

2

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

4 *"As noted earlier, allowing Nova to deviate from a cost-efficient investment to one*
5 *without a positive NPV is concerning. Moreover, there's no evidence that the Minister or*
6 *Board recognized Nova as an Investment—an initiative that might not meet strict*
7 *financial criteria but is essential for the ratepayer's future. When conventional financial*
8 *metrics (like payback and NPV) don't apply, a significant decision of this magnitude*
9 *typically requires in-depth consideration by the "owners"—the Board—and often after*
10 *consultations with the Minister and the Government. PWC's statement that "there is*
11 *currently no validated perspective on R3 costs" suggests that costs are anticipated to*
12 *rise further."*

13 **Question:**

14 Please indicate, and provide rationale to support, answer to whether it is suitable for
15 organizations who select to initiate technology modernization initiatives of similar size
16 and scale as Project Nova to use positive NPV and payback.

17 **Rationale for Question:**

18 To understand author's perspective on framework used to select and assess Project
19 Nova.

20 **RESPONSE:**

1 NPV and Payback are two different financial measures and as such will be treated
2 separately in the response.

3 First, in regard to the Payback method, it is a straightforward financial metric used to
4 determine the amount of time it takes for an investment to generate an amount of
5 money equal to the original investment. Essentially, it answers the question: "How
6 long will it take for this project to pay for itself?" Its advantages are simplicity to most
7 stakeholders. Also, in my experience that projects with shorter payback
8 periods are perceived to have lower risk since they recover their costs faster. Payback
9 can be useful for comparing projects of similar returns – allow an assessment of the
10 payback "time". Its disadvantages include ignoring the time value of money, cash
11 flows after payback, and a natural bias against long-term projects. For this reason,
12 payback is usually used in conjunction with other metrics such as NPV.

13 Second, using Net Present Value (NPV) for large digital transformation projects is a
14 common financial approach to evaluate the potential return on investment (ROI) of
15 the initiative. NPV provides a measure of the expected profitability of an investment
16 by considering the time value of money, which makes it a valuable tool for assessing
17 long-term projects like digital transformations. Here are some considerations on the
18 appropriateness of using NPV for such projects:

19 Advantages:

- 20 1. **Time Value of Money:** NPV inherently considers the time value of money,
21 helping organizations understand the present value of future cash flows. This is
22 especially important for digital transformation projects that might have
23 significant upfront costs but deliver benefits over an extended period.
- 24 2. **Objective Evaluation:** NPV offers a quantitative measure to compare the
25 expected returns from the project to its costs. If the NPV is positive, it suggests
26 the project might be a good investment. This can help in prioritizing projects or
27 deciding between alternative approaches.

1 3. **Cash Flow Analysis:** To calculate NPV, you need to estimate future cash
2 flows. This process forces organizations to think about both the costs and the
3 expected financial benefits in detail.

4 Challenges and Limitations:

5 1. **Estimation Uncertainties:** Digital transformation projects often involve
6 significant uncertainties, from technological challenges to market changes.
7 Estimating future cash flows accurately can be difficult.

8 2. **Non-Financial Benefits:** Digital transformation can bring about non-financial
9 benefits, such as improved customer satisfaction, brand strengthening,
10 increased agility, or enhanced innovation capabilities. These factors might not
11 be easily quantified but can be crucial for long-term success.

12 3. **Changing Dynamics:** The landscape of technology and digital capabilities can
13 shift rapidly. What seems like a significant advantage now may become
14 standard in a few years. This dynamic nature can affect both the costs (e.g.,
15 implementation might get cheaper) and benefits (e.g., competitive advantage
16 might diminish).

17 NPV is a valuable tool and is appropriate for evaluating large digital transformation
18 projects. However, it is not being suggested it should be the exclusive deciding factor
19 but should be used in conjunction with other evaluation methods and considerations.
20 Considering both quantitative measures like NPV and qualitative benefits,
21 understanding the strategic value, considering risks, and regularly revisiting
22 assumptions are essential for making informed decisions about digital transformation
23 investments.

24 Having worked with governments, crowns, and private corporations, in my experience
25 NPV and payback have been used in the majority of business cases with exceptions
26 where market conditions warranted a project for survival against a fierce competitor.

27 **RATIONALE FOR REFUSAL TO FULLY ANSWER THE QUESTION:**

1 **PUB (CAC)-19**

Part and Chapter:	An Independent Commentary on Technology at MPI	Page No.:	15
PUB Approved Issue No:	20. Project Nova		
Topic:	MPI 2.0		
Sub Topic:	5.5.5 Lack of Team Buy-in on MPI 2.0		

2

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

4 *"As Nova has evolved and appears to reflect the themes of MPI 2.0, a review of*
5 *documents from the 2024 GRA revealed a concerning statement: "The vision of MPI 2.0*
6 *was predominantly crafted by Eric Herbelin, former CEO of MPI, with minimal input from*
7 *internal stakeholders." Considering the pivotal role that team buy-in holds in*
8 *transformative projects, this revelation warrants a thorough reevaluation of the MPI 2.0*
9 *initiative. Moreover, such an unexpected disclosure about a major initiative raises*
10 *questions about the extent of team involvement during the Nova revision process under*
11 *Mr. Herbelin's leadership."*

12 **Question:**

13 Please elaborate further on evidence leading to observation of minimal input from
14 internal stakeholders and the lack of buy-in from MPI stakeholders on MPI 2.0.

15 **Rationale for Question:**

16 To understand author's perspective pertaining to the plan / expectations of MPI 2.0.

17 **RESPONSE:**

- 1 This observed was based on the information shared by MPI in response to PUB(MPI) 1-
- 2 110, where MPI stated “The vision of MPI 2.0 was predominantly crafted by Eric
- 3 Herbelin, former CEO of MPI, with minimal input from internal stakeholders.”

4 **RATIONALE FOR REFUSAL TO FULLY ANSWER THE QUESTION:**

1 **PUB (CAC)-20**

Part and Chapter:	An Independent Commentary on Technology at MPI	Page No.:	15
PUB Approved Issue No:	20. Project Nova		
Topic:	Project Nova Scope		
Sub Topic:	5.5.4 Scope Creep & MPI 2.0		

2

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

4 *"Nova started as a Legacy Modernization initiative. Its scope then expanded to a digital*
5 *transformation initiative, and now is moving to include concepts from "MPI 2.0". This*
6 *significant scope expansion typically warrants a new business case, ensuring a rigorous*
7 *evaluation of costs and benefits."*

8 **Question:**

- 9 a) Please elaborate further on why the author notes significant scope expansion has
10 occurred from the original Legacy Modernization initiative into Project Nova.
- 11 b) Please elaborate on the elements of MPI 2.0 that are now moving into Project
12 Nova.
- 13 c) Please provide author's definition of "scope".

14 **Rationale for Question:**

15 To further understand Author's perspective on the scope evolution for Project Nova.

16 **RESPONSE:**

1 a) The Legacy Modernization business case text was provided in 2024 GENERAL
2 RATE APPLICATION, Part V - NOV Appendix 7 – Confidential dated June 15,
3 2023 entitled “Legacy Systems Modernization 2018-19” and was dated
4 February 28, 2019. The scope was stated to include:

- 5 • The Property and Casualty (P&C) Insurance System – used to manage
6 insurance sales and physical damage claims.
- 7 • The Driver and Vehicle System (DVA) – used to manage vehicle
8 registrations and driver licensing.
- 9 • The Business Application Platform (BAP2) – used to present a digital
10 experience to customers and host custom workflows and applications
11 required to support MPI business.
- 12 • Digital Customer Self-Service options – implementing digital Insurance,
13 digital DVA and digital
- 14 • BAP for respective in-scope core platform features as listed above.

15 The scope of the above was termed the Legacy Systems Modernization(LSM), and
16 according to MPI’s Program Update including in 2024 GENERAL RATE
17 APPLICATION, Part V - NOV Appendix 12 – Confidential, Page 5, “Quickly after the
18 project implementation began, missing elements were discovered, including:
19 Enterprise Architectural Maturity, Cloud Infrastructure and Capabilities, DVA cloud
20 hosting, Organization Capacity, Billing Architecture / Billing module for DVA, (and)
21 Several smaller items”.

22 Further explanation of the increased scope of Nova can be found in 2024 GENERAL
23 RATE APPLICATION Part V - NOVA – Confidential, where MPI indicates the increase
24 in scope as well as:

1 (1) Substantial increase in costs from \$106.8M(\$85.4M plus the \$21.1M
2 contingency) to a budget of \$313.74M (\$224.1M plus the 40%
3 contingency) as reported on Page 7;

4 (2) Substantial increase in project timelines from 3 years to 5 years
5 reported on page 9;

6 Based on the above factors: an increase in stated scope, a substantial increase in
7 budget, and a 166% increase in timeline, this represented a significant increase in
8 Nova’s scope.

9 b) In term of MPI 2.0 there are a number of references to this throughout the
10 2024 GRA documents, starting with the May 11, 2023 IT Summit, that indicate
11 movement towards MPI 2.0 is underway. Examples include:

12 a. The Lean Business Case for Cloud Migration, (2024 GENERAL RATE
13 APPLICATION, Part V – VA Appendix 4b – Confidential, Page 3) “MPI is
14 actively focused on its 5-year ambition (beginning FY 2022/23) , a
15 journey which will result in reaching MPI 2.0. To reach MPI 2.0, MPI
16 must continue to invest and deliver in the current fiscal year (MPI 1.0),
17 achieve it’s 3-year targets with emphasis on delivering NOVA (MPI 1.5)
18 and ultimately reaching MPI 2.0.” This statement indicates a directional
19 change towards MPI 2.0 and that Nova is “MPI 1.5”.

20 It is important to note that Cloud was one of the stated scope increases
21 in Nova per MPI’s Program Update including in 2024 GENERAL RATE
22 APPLICATION, Part V - NOV Appendix 12 – Confidential, Page 5;

23 b. The Innovation Funding discussion at the Technology Committee
24 meeting regarding ProSci as well as Culture (2024 GENERAL RATE
25 APPLICATION, Part V - IT Appendix 7 – Confidential, page 22);

26 c. Data 2.0 Detailed Solution Architecture Initiative where it indicates
27 “Rationale: Connects to MPI 2.0 and a data driven approach to business

- 1 decisions” (2024 GENERAL RATE APPLICATION, Part V - VA Appendix 7c
2 – Confidential, page 1)
- 3 d. Power BI Rollout Phase 2, where it indicates “our solution enables MPI
4 to be a more data-driven Corporation, in alignment with MPI 2.0” (2024
5 GENERAL RATE APPLICATION, Part V – VA Appendix 22a – Confidential,
6 Page 2)
- 7 e. Referral to R3 of Nova providing the Cloud platform for MPI 2.0 (2024
8 GENERAL RATE APPLICATION, Part V - Appendix 43 – Confidential, Page
9 9, “Data Centre: Cloud Optimization from 2021/22 Cloud Strategy”)
- 10 f. \$200,000 spent with McKinsey on the MPI 2.0 Assessment (2024 GRA
11 Round 1 Information Requests, PUB (MPI) 1-85(a)(b) – Confidential,
12 Page 5)
- 13 g. McKinsey referral to pre-discovery for R3 of Nova including “Alignment
14 with corporate vision (MPI 2.0), R3 scope, and success criteria to
15 measure completion of pre-discovery/discovery” (2024 GRA Round 1
16 Information Requests, PUB (MPI) 1-85(a)(b) Appendix 2- Confidential,
17 Page 3).
- 18 Another statement by McKinsey in regard to R3 of Nova pre-discovery
19 and discovery “Tighten linkage with strategy (MPI 2.0)” (2024 GRA
20 Round 1 Information Requests, PUB (MPI) 1-85(a)(b) Appendix 28 –
21 Confidential, Page 4)
- 22 In closing, the most recent MPI documents show that MPI 2.0 is intended
23 “future business state”. In the realm of technology this term indicates that this
24 is the direction that technology should be supporting. Based on the above
25 examples, I believe it is appropriate to state that MPI is using Nova to enable
26 elements of MPI 2.0.

1 c) The scope of a project refers to the defined and agreed-upon boundaries or extent
2 of work that needs to be accomplished to meet the project's objectives. It outlines
3 the specific goals, deliverables, tasks, costs, and deadlines of the project.

4 In a large technology project, such as Nova, scope typically encompasses a variety
5 of elements, including:

6 1. Functional Requirements: A detailed list of functionalities that the end
7 product must possess. This might include software features, system
8 capabilities, or other technical specifications.

9 2. Deliverables: Tangible and intangible items or services that will be
10 delivered upon the project's completion. For a technology project,
11 deliverables might include software applications, documentation,
12 training materials, or infrastructure improvements.

13 3. Boundaries: Clearly stating what is *inside* the scope (i.e., what will be
14 addressed) and what is *outside* of it (i.e., what will not be addressed).
15 This helps prevent scope creep, where unplanned-for features or
16 functionalities start getting added to the project.

17 4. Resources: Identifying the personnel, equipment, and materials needed
18 to execute the project within its defined boundaries.

19 5. Timeframes: Specifying the start and end dates, milestones, and
20 deadlines for various stages or tasks within the project.

21 6. Constraints and Assumptions: Recognizing the limitations, potential
22 risks, or assumptions being made during the planning and execution of
23 the project.

24 Managing and maintaining the defined scope is essential for the successful
25 completion of large projects. Any changes to the scope should go through a
26 structured change control process to assess the impact on the project's time,

1 cost, and resources. This is crucial because uncontrolled changes or "scope
2 creep" can lead to projects going over budget, missing deadlines, or not
3 meeting original objectives. Substantial increases in scope often warrant a
4 revisiting of the original business case.

5 **RATIONALE FOR REFUSAL TO FULLY ANSWER THE QUESTION:**

1 **PUB (CAC)-21**

Part and Chapter:	An Independent Commentary on Technology at MPI	Page No.:	19
PUB Approved Issue No:	20. Project Nova		
Topic:	Project Nova Roadmap		
Sub Topic:	6. Recommendations		

2

3 **Preamble to Question:**

4 The Author notes "Pause, De-risk, and Rescope" as a key recommendation for Project
5 Nova going forward.

6 **Question:**

7 a) As Release 1, Release 2, licences, and vendor engagements have commenced
8 for Project Nova, please elaborate further on the potential impact to achieving
9 modernization of MPI's legacy systems within the stated timelines.

10 b) Please comment on whether the need to modernize IT systems for public and/or
11 large scaled insurers continues to be a key industry trend.

12 c) Please comment on the one most concerning aspect of scope which needs to be
13 addressed prior to resuming Project Nova.

14 **Rationale for Question:**

15 To further understand author's perspective on the scope go forward next steps for
16 Project Nova.

17 **RESPONSE:**

1 a) Implementing the recommendations would impact Nova in several ways, and exact
2 predictions are beyond the scope of information provided by the 2024GRA and
3 would require more intimate familiarity with the Nova team and contractors.
4 However, in general, it would be reasonable to expect that the pause would result
5 in a delay to Nova while MPI steps back to consider reducing the scope of Nova
6 and breaking into smaller parts. Also, the requirement to reestablish the NPV and
7 Payback financial measures and requirements would likely result in some
8 components of Nova being removed from the initiative. Further by breaking Nova
9 into smaller projects and reassessing the other 40+ projects which MPI is
10 considering putting on hold(per GRA 2024, CAC (MPI) 2-1), it is quite likely that a
11 new "road map" of projects would appear.

12 b) Modernization is an ongoing trend for public and private sector organizations. The
13 large investments made in technology over the past 40 years have resulted in
14 almost every organization having systems which are becoming outdated.

15 A paradox emerges as organizations, like MPI, invest in new technologies, as these
16 too will become outdated and at some point, require modernization. This becomes
17 a never-ending cycle, that can, potentially, consume more and more of the
18 organizations budget. As such, it is essential that modernization initiatives be
19 balanced against the fiscal realities of the organizations they serve.

20 c) My deepest concern is that Nova has become too many components that go
21 beyond the original intent of dealing with MPI's legacy systems. In addition, it
22 appears that when Avasant and further consultants were brought in to look at
23 Nova's scope, cost and timeline increase, the consultants were not charged with
24 finding ways to bring Nova back to a reasonable cost and return on investment to
25 ratepayers. As discussed in the answer to b), above, all organizations have
26 outdated systems, and as such there are multiple means to address this issue
27 beyond complete system replacement.

28 **RATIONALE FOR REFUSAL TO FULLY ANSWER THE QUESTION:**