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Cheryl Blundon,
Board Secretary
Board of Commissioners of Public Utilities
P.O. Box 21040
St. John's, Newfoundland and Labrador
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May 17, 2018

Subject: Minor Injury Reform Cost Estimates – Private Passenger Automobiles- Amended

Dear Ms. Blundon:

The Board has asked Oliver, Wyman Limited (Oliver Wyman) to estimate the cost impact on Third Party Liability – Bodily Injury claim costs and premiums arising from the use of private passenger automobiles in Newfoundland and Labrador if the non-pecuniary payment were capped for claimants with a minor injury, using the minor injury definitions of other Atlantic provinces.

In this report, we present Oliver Wyman's estimate of the percentage claim cost reduction to the Bodily Injury total claim costs based on 3 alternative indexed cap limits (\$5,000, \$7,500 and \$10,000) that would be applied to the non-pecuniary loss of those claimants with a minor injury, as well as an estimate of the reduction to average required premium.

In addition, we provide the Board our estimate of the percentage claim cost reduction to the Bodily Injury total claim costs based on the current deductible of \$2,500 that is applied to the non-pecuniary loss of all claimants. We also present the estimated impact of other alternative deductible amounts (\$5,000, \$7,500 and \$10,000) that would also potentially apply to the non-pecuniary loss of all claimants. We also present an estimate of the reduction to average required premium.

The analysis and findings that we present in this report are based on the database collected by the Insurance Bureau of Canada of recently closed Bodily Injury claims for private passenger automobiles in Newfoundland and Labrador. We refer to this database as the Newfoundland and Labrador 2018 Closed Claim Study (NL 2018 CCS). The NL 2018 CCS includes detailed claims payment and injury type data on 1,741 claimants¹ from eighteen insurers on claims that were closed during the period January 1, 2016 to November 30, 2017. We provided our summary of the NL 2018 CCS to the Board in our report dated April 19, 2018.

In this report, we also discuss the possibility that reforms that limit the amount paid may also influence the propensity to report and pursue a claim.

This report replaces the original version dated April 19, 2018 with a calculation correction that affects Table 2 and Exhibits 9 to 12. All changes are highlighted in grey.

We are available at your convenience to discuss this report.

Sincerely,



Paula Elliott FCAS, FCIA

¹ The closed claim study conducted by IBC included data on 1,977 claimants from twenty insurers. However, due to a data issue, the data of two insurers was excluded, reducing the number of claimants to 1,741. Our report is based upon our review of these 1,741 claimant data files.

MINOR INJURY REFORM COST ESTIMATES - PRIVATE PASSENGER AUTOMOBILES

NEWFOUNDLAND AND LABRADOR INSURANCE INDUSTRY

AMENDED: 17 MAY 2018



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1. Introduction and Summary

The Province of Newfoundland and Labrador is considering reforms that will impact Private Passenger Automobile Bodily Injury coverage.

Under consideration by the Minister of Services NL are:

- Indexed² cap limits of \$5,000, \$7,500 or \$10,000 on non-economic loss (also known as the non-pecuniary loss) for claimants with a minor injury as defined in other Atlantic Provinces.
- Continuation of a deductible on the non-pecuniary loss for all claimants at the current \$2,500 deductible, or higher deductible levels of \$5,000, \$7,500 or \$10,000.

The Board of Commissioners of Public Utilities of Newfoundland and Labrador (“The Board”) has been directed to undertake this review and has engaged Oliver Wyman to assist with this review.

In this report, we provide the background to this study; summarize our key findings; and discuss the data we considered, the methodology we applied, and the key assumptions that we made. We also comment on the uncertainty surrounding our estimates and the limitations of our study. Summary information of our findings is presented in the attached Exhibits.

Summary of Key Findings

A cap on the non-pecuniary loss for claimants with a minor injury would result in:

1. A reduction in the average total settlement amount paid to claimants with a minor injury.
2. A reduction in the total number of Bodily Injury claims reported for the Industry.
3. The combined impact of the two items above would lead to a reduction in the total claims costs for the Industry, and a commensurate reduction in required premiums.

² Indexing refers to the application of an inflation adjustment to the cap limit.

Our findings are based on the private passenger automobile Bodily Injury claimant data collected on 1,741³ claimants whose claim closed during the period January 1, 2016 to November 30, 2017, regardless of the date when the accident that gave rise to the claim occurred. We refer to this as the NL 2018 CCS database.

Based upon our review of this NL 2018 CCS data, we estimate that approximately 66% to 76% of the private passenger Bodily Injury claimants would be subject to the capping of non-pecuniary losses if a minor injury definition similar to that of Nova Scotia or New Brunswick were introduced.

The introduction of a minor injury cap may influence the propensity to report and pursue a claim. There is likely a correlation between the cap amount and the likelihood that a claim is not reported; the lower the cap amount, the higher the likelihood the claim is not reported and pursued. We discuss this issue (including our findings of changes in Bodily Injury claims frequency rates⁴ in Nova Scotia and New Brunswick when minor injury caps were introduced in these provinces) later in this report. Based on our judgment and review of the experience in other provinces, we present our findings assuming the Bodily Injury claims frequency rate for claimants with a minor injury may decline by up to 15% with the introduction of a cap.

In addition to the direct reduction in the average total settlement amount for claimants that is expected if a cap on the non-pecuniary loss is introduced, there may also be an associated impact on other costs, such as the claims allocated adjustment expense costs (ALAE).

And as a result of such a cap, and a change in the claims frequency rate, we estimate the total settlement and ALAE amount would reduce by the following range of percentages:

Table 1: Percentage Reduction in Total Settlement & ALAE Costs- All Claimants

	0% Change in Minor Injury Frequency	5% Change in Minor Injury Frequency	10% Change in Minor Injury Frequency	15% Change in Minor Injury Frequency
\$5,000 Cap	21% - 27%	23% - 29%	25% - 31%	27% - 34%
\$7,500 Cap	19% - 24%	20% - 26%	22% - 28%	24% - 31%
\$10,000 Cap	16% - 21%	18% - 23%	20% - 25%	21% - 28%

³ The claimant files were closed in the following time periods: 342 from January 1, 2016 to June 30, 2017; 1,393 from July 1, 2016 to June 30, 2017, and 6 from July 1, 2017 to November 30, 2017.

⁴ Frequency rate refers to the number of claims as a percentage of insured vehicles.

The findings we present in Table 1 above represent the percentage reduction in the total settlement cost including ALAE for all claimants, on average. Higher percentage reductions would apply to those claimants subject to the cap.

In Table 2 below, we present a range of the estimated average reduction in required premiums for the various capping levels under consideration.

Table 2: Average Reduction in Premiums⁵

Premium \$ Reduction	0% Change in Minor Injury Frequency	5% Change in Minor Injury Frequency	10% Change in Minor Injury Frequency	15% Change in Minor Injury Frequency
\$5,000 Cap	\$112 - \$139	\$121 - \$151	\$131 - \$163	\$140 - \$175
\$7,500 Cap	\$97 - \$123	\$106 - \$135	\$116 - \$147	\$125 - \$159
\$10,000 Cap	\$83 - \$108	\$92 - \$120	\$102 - \$132	\$112 - \$144

The findings we present in Table 2 above represent the average reduction in premium from our estimate of the 2017 Accident Year⁶ required average premium as discussed in our report titled *Oliver Wyman NL Profit and Rate Adequacy Review* dated March 29, 2018. These average reduction estimates are based on Industry aggregated data and may not apply to any individual insurer.

Deductibles on Non-Pecuniary Loss

If the Government chooses to apply a higher deductible (than the current \$2,500 deductible) to the non-pecuniary loss of all claimants, instead of a cap, we estimate that the average total settlement amount would reduce, but would be subject to erosion.⁷ Our estimates of the percentage cost reduction with a deductible on the non-pecuniary loss for all claimants are subject to the additional uncertainty of erosion. In contrast, a cap on the non-pecuniary loss is not subject to erosion.

⁵ Table 2 above reflects an update from the original version of this report that was dated April 19, 2018; with changes in grey. Exhibits 9 through 12 are also updated with changes in grey. These updates correctly present the results of "Definition 3" calculations; Definition 3 is referenced and explained in Section 4 of this report.

⁶ The estimated required average premium for the 2017 Accident Year is presented in Appendix B, Pages 1 to 3 in the *Oliver Wyman NL Profit and Rate Adequacy Review* report dated March 29, 2018. Our calculations for the reduction in premium(s) that we present in Table 2 above are presented in this report in Exhibits #1, 5, and 9.

⁷ An example of erosion is the impact of inflation. As inflation applies to overall settlement costs over time, the value of a fixed (non-indexed) deductible amount will represent a lower percentage of settlement costs. Thus, the impact of the deductible will erode over time.

We estimate the average private passenger Bodily Injury total settlement and ALAE amount for claimants would reduce, on average, by the following approximate percentages if the \$2,500 deductible was increased to \$5,000, \$7,500 or \$10,000:

Table 3: Percentage Reduction in Average Settlement & ALAE Costs- All Claimants

Total Settlement % Reduction	\$5,000 Deductible	\$7,500 Deductible	\$10,000 Deductible
All Claimants - No Erosion	4%	9%	13%
All Claimants - With Erosion	3% - 4%	6% - 7%	9% - 11%

In Table 4 below, we present a range of the estimated average reduction in premiums for these alternative deductible levels under consideration.

Table 4: Average Reduction in Premiums

Premium \$ Reduction	\$5,000 Deductible	\$7,500 Deductible	\$10,000 Deductible
All Claimants - No Erosion	\$23	\$45	\$65
All Claimants - With Erosion	\$17 - \$19	\$33 - \$38	\$49 - \$55

Like Table 2, the findings we present in Table 4⁸ above represent the average reduction in premium from our estimate of the 2017 Accident Year required average premium as discussed in our report titled *Oliver Wyman NL Profit and Rate Adequacy Review* dated March 29, 2018.

We discuss our assumptions and methodology to determine these estimates in this report.

It is important to note that due to the nature of any forecast, the estimates we present in this report are based on numerous assumptions, both explicit and implicit. Our findings are sensitive to these assumptions, and are particularly sensitive to certain assumptions – such as the impact that reforms may have on Bodily Injury coverage claim frequency rates and the percentage of all claimants that will be defined as a minor injury claimant in Newfoundland and Labrador. While we believe our assumptions to be reasonable, to the extent that they prove not to be valid, the actual experience that emerges may be materially different than what we have estimated.

The average reduction in premiums that we estimate and present in Tables 2 and 4 above are based on Industry aggregated data and may not apply to any individual insurer.

⁸ Our calculations for the reduction in premium(s) that we present in Table 4 above are presented in this report in Exhibit # 13.

2. Caveats

- This report was prepared to estimate the potential implications on Newfoundland and Labrador private passenger insurance claim costs and premiums as a result of reform measures that are being considered for the Industry, in aggregate. It is not intended for any other purpose.
- The findings apply only to private passenger vehicles and do not apply to other lines of automobile insurance business.
- The conclusions contained in this report may not be applicable to any specific insurance company. For example, each insurer operates with its own set of underwriting rules and may write a book of business that is significantly different than the average Industry-wide book of business we rely upon.
- The estimates of premium savings we present are based on a savings from adequate rates for the accident year 2017, since this is the most recent Industry data that is available. We would expect that economic forces will impact future insurance claim costs and required premium levels under the current \$2,500 deductible in the Province. As a result, to the extent that reforms would be implemented at a date in the future, there is additional uncertainty around the estimates presented in this report.

3. Minor Injury Definition

The Government of Newfoundland and Labrador is considering introducing a cap on non-pecuniary loss to claimants based on the definition of a minor injury used in the other Atlantic Provinces.

Nova Scotia, New Brunswick, and Prince Edward Island introduced minor injury regulations (MIR) with a \$2,500 cap on non-pecuniary losses in November 1, 2003, July 1, 2003, and April 1, 2004 respectively. The following law excerpts reflect the *original* minor injury definitions (that have since been amended):

Nova Scotia 2003 Minor Injury Definition:

According to the Nova Scotia Automobile Accident Minor Injury Regulations (MIR) effective on November 1, 2003 under Section 113B of the Insurance Act:

- (a) *"minor injury" means a personal injury that*
 - (i) *does not result in a permanent serious disfigurement,*
 - (ii) *does not result in a permanent serious impairment of an important bodily function caused by a continuing injury which is physical in nature, and*
 - (iii) *resolves within twelve months following the accident.*
- (b) *"serious impairment" means an impairment that causes substantial interference with a person's ability to perform their usual daily activities or their regular employment.*

New Brunswick 2003 Minor Injury Definition:

According to New Brunswick Minor Injury Regulations (MIR) effective on July 1, 2003 under the *Injury Regulation - Insurance Act*:

- "minor personal injury" means an injury that does not result in*
- (a) *permanent serious disfigurement, or*
 - (b) *permanent serious impairment of an important bodily function caused by continuing injury which is physical in nature*

"serious impairment" means an impairment that causes substantial interference with a person's ability to perform their usual daily activities or their regular employment.

Prince Edward Island 2004 Minor Injury Definition:

According to the Prince Edward Island Insurance Act, effective on April 1, 2004:

"minor personal injury" means an injury that does not result in

- (a) *permanent serious disfigurement, or*
- (b) *permanent serious impairment of an important bodily function caused by continuing injury that is physical in nature*

“serious impairment” means an impairment that causes substantial interference with a person’s ability to perform his or her usual daily activities or his or her regular employment.

Amended Minor Injury Definitions

Nova Scotia amended its MIR effective for claims that occur on or after April 28, 2010, and introduced an indexed cap of \$7,500 at that time. This indexed cap has since increased to \$8,579 effective January 1, 2018. New Brunswick amended its MIR effective for claims that occur on or after July 1, 2013, and introduced an indexed cap of \$7,500 at that time. New Brunswick’s indexed cap has since increased to \$7,999 effective January 1, 2018. Prince Edward Island made amendments effective for claims that occur on or after October 1, 2014, and introduced an indexed cap of \$7,500 at that time. Prince Edward Island’s indexed cap has since increased to \$7,681 effective January 1, 2018. The amended minor injury definitions are considered to be more restrictive than the original definitions listed above, and, accordingly, reduce the number of claimants that would be subject to the minor injury cap. The following are key excerpts of the current minor injury definitions for each of Nova Scotia and New Brunswick:

Nova Scotia 2010 Minor Injury Definition:

The current definition of a minor injury in Nova Scotia effective for claims that occurred on or after April 28, 2010 includes:⁹

The determination as to whether an injury suffered by a claimant as a result of an accident is or is not a minor injury must be based on the following:

- (a) *a determination as to whether the injury is a sprain, strain or whiplash-associated disorder injury; and*
- (b) *if the injury is determined to be a sprain, strain or whiplash-associated disorder injury, a determination as to whether the sprain, strain or whiplash-associated disorder injury results in a serious impairment.*

In addition,

“serious impairment”, in respect of a claimant, means an impairment of a physical or cognitive function that meets all of the following:

- (i) *the impairment results in a substantial inability to perform any or all of the following:*

⁹ The complete definition can be found at: <https://novascotia.ca/just/regulations/regs/imminor.htm>

- (A) *the essential tasks of the claimant's regular employment, occupation or profession, despite reasonable efforts to accommodate the claimant's impairment and the claimant's reasonable efforts to use the accommodation to allow the claimant to continue the claimant's employment, occupation or profession,*
 - (B) *the essential tasks of the claimant's training or education in a program or course that the claimant was enrolled in or had been accepted for enrolment in at the time of the accident, despite reasonable efforts to accommodate the claimant's impairment and the claimant's reasonable efforts to use the accommodation to allow the claimant to continue the claimant's training or education,*
 - (C) *the normal activities of the claimant's daily living,*
- (ii) *the impairment has been ongoing since the accident, and*
 - (iii) *the impairment is expected not to improve substantially,*

"sprain" means an injury to one or more tendons, to one or more ligaments, or to both tendons and ligaments;

"strain" means an injury to one or more muscles;

"whiplash-associated disorder injury" means a whiplash-associated disorder other than one that exhibits one or all of the following:

- (i) *neurological signs that are objective, demonstrable, definable and clinically relevant,*
- (ii) *a fracture to the spine or a dislocation of the spine.*

New Brunswick 2013 Minor Injury Definition:

The current definition of a minor injury in New Brunswick effective for claims that occurred on or after July 1, 2013 includes:¹⁰

"Minor personal injury" means any of the following injuries, including any clinically associated sequelae, that do not result in serious impairment or in permanent serious disfigurement:

- (a) *a contusion;*
- (b) *an abrasion;*
- (c) *a laceration;*
- (d) *a sprain;*
- (e) *a strain; and*
- (f) *a whiplash associated disorder*

"serious impairment", means, in respect of a plaintiff, an impairment of a physical or cognitive function that:

- (a) *results in a substantial inability to perform*
 - (i) *the essential tasks of the plaintiff's regular employment, occupation or profession, despite the plaintiff's reasonable efforts to use any accommodation provided to assist the plaintiff in performing these tasks,*
 - (ii) *the essential tasks of the plaintiff's training or education in a program or course in which the plaintiff was enrolled or had been accepted for enrolment at the time of the accident, despite*

¹⁰ The complete definition can be found at: http://laws.gnb.ca/en/showfulldoc/cr/2003-20/#anchorga:l_2

- the plaintiff's reasonable efforts to use any accommodation provided to assist the plaintiff in performing those tasks, or*
- (iii) the plaintiff's normal activities of daily living,*
- (b) has been ongoing since the accident, and*
- (c) is not expected to improve substantially.*

"sprain" means an injury to one or more tendons or ligaments or to one or more of each.

"strain" means an injury to one or more muscles.

"whiplash associated disorder" means a whiplash injury that

- (a) does not exhibit objective, demonstrable, definable and clinically relevant neurological signs, and*
- (b) does not exhibit a fracture in or dislocation of the spine*

Prince Edward Island 2014 Minor Injury Definition:

The current definition of a minor injury in Prince Edward Island effective for claims that occurred on or after October 1, 2014 includes:¹¹

"Minor personal injury" means any of the following injuries, including any clinically associated sequelae, that do not result in serious impairment:

- (i) sprain,*
- (ii) strain, or*
- (iii) whiplash-associated disorder injury;*

"serious impairment" means an impairment of a physical or cognitive function that meets all of the following requirements:

- (i) the impairment results in a substantial inability to perform any or all of the following:*
 - (A) the essential tasks of the person's regular employment, occupation or profession, despite reasonable efforts to accommodate the person's impairment and the person's reasonable efforts to use the accommodation to allow the person to continue his or her employment, occupation or profession,*
 - (B) the essential tasks of the person's training or education in a program or course that the person was enrolled in or had been accepted for enrolment in at the time of the accident, despite reasonable efforts to accommodate the person's impairment and the person's reasonable efforts to use the accommodation to allow the person to continue his or her training or education,*
 - (C) the normal activities of the person's daily living,*
- (ii) the impairment has been ongoing since the accident, and*
- (iii) the impairment is expected not to improve substantially;*

"sprain" means an injury to one or more tendons, to one or more ligaments, or to both tendons and ligaments;

¹¹ The complete definition can be found in Section 254 at:
<https://www.princeedwardisland.ca/sites/default/files/legislation/l-04-Insurance%20Act.pdf>

“strain” means an injury to one or more muscles;

“whiplash-associated disorder injury” means a whiplash-associated disorder other than one that exhibits one or both of the following:

- (i) neurological signs that are objective, demonstrable, definable and clinically relevant,*
- (ii) a fracture to the spine or a dislocation of the spine.*

Newfoundland Proposed Minor Injury Definition

Although the minor injury definitions in the other Atlantic provinces are not identical, there are many similarities among the definitions. For the purpose of this analysis, we assume the practical application of these definitions is the same; that is, the determination of whether a claimant suffered a minor injury would be the same under any of the three definitions. We based this assumption on our findings stated in our report dated April 19, 2018 titled “Closed Claim Study Summary - Private Passenger Automobile:

“Insurers were asked to assess if the claimant’s injuries would have been considered “Minor” in New Brunswick or Nova Scotia, and respond: (1) minor, (2) unknown or (3) not-minor. We provide the following summary of the responses (which were not verified by IBC).

In the assessment for New Brunswick’s definition, of the 1,741 claimants, 940 (54%) had injuries that would be considered “minor,” 347 claimants (20%) had injuries that would not be considered “minor,” and 452 claimants (26%) were reported as “unknown”.

In the assessment for Nova Scotia’s definition, of the 1,741 claimants, 942 (54%) had injuries that would be considered “minor”, 347 claimants (20%) had injuries that would not be considered “minor,” and 452 claimants (26%) were reported as “unknown.”

All but 2 claimants were classified identically on the survey for assessment of New Brunswick’s definition and assessment of Nova Scotia’s definition.”

Based on this survey information, the percentage of claimants in the NL 2018 CCS that could be defined as a claimant with a minor injury would fall between 54% - 80%¹² of all claimants. However, this assignment of claimants to the respective Nova Scotia and New Brunswick minor injury definitions has not been validated by IBC, and thus we do not rely upon these groupings in our analysis.

¹² 80% is based on the sum of 54% and 26%.

As we discuss later in this report, there is some evidence that the amended 2013 New Brunswick MIR is perceived to be broader (i.e., a larger percentage of claimants considered to be minor) than the 2010 Nova Scotia MIR. However for this study, we assume that either definition if introduced in Newfoundland and Labrador would result in a similar percentage of claimants defined as a minor injury claimant.

In the following section we discuss how we identify which claimants could be considered minor injury claimants and be subject to the cap on the non-pecuniary loss amount.

4. Claimants with Minor Injuries

We used the NL 2018 CCS database (of 1,741 claimants) to identify which claimants may be considered to have suffered a minor injury, and therefore be subject to a cap on the non-pecuniary loss, based on their reported injuries.

For each of the 1,741 claimants, one or more of 35 different injury types were identified as the basis upon which the claim settlement amount was paid. These 35 different injury types are described in IBC's instructions to insurers regarding the NL 2018 CCS survey completion.

While there is no definitive mapping of the 35 injury types to the MIR in Nova Scotia or New Brunswick, IBC assigned each of the 35 injury types into one of three *classes* that assisted with the assessment of which injury types may be associated with a claimant who has suffered a minor injury.

As grouped by IBC, there are eight injury types in Class 1, six injury types in Class 2, and 21 injury types in Class 3. IBC provided the following descriptions of Classes 1, 2, and 3:

Class 1: *"This class includes reported single injury or multiple injuries in the same class that are assumed to be minor unless the claimant is assessed and deemed to have a serious impairment based on the respective definition in NB/NS. If there is a finding of serious impairment, the overall injury determination will be deemed to be non-minor."*

The eight injury types included in Class 1 are:

1. Neck Injury - WAD I
2. Neck Injury - WAD II
3. Back injury - Grade 1
4. Back injury - Grade 2
5. Knee injury – Minor
6. Shoulder injury – Minor
7. Other Joint Injury –
8. Minor laceration(s), contusion(s) or bruise(s), burn(s), or just "shaken up"

Class 2: *"This class includes reported injury(ies) which may be minor or non-minor injury depending on the severity of the injury itself and the resulting impairment(s) experienced by the individual claimant. If the injury is deemed non-minor or*

there is a finding of serious impairment, the overall injury determination will be non-minor.”

The six injury types included in Class 2 are:

1. Fracture - Other
2. Temporomandibular joint (TMJ) dysfunction without jaw fracture
3. Chronic pain syndrome
4. Psychological/emotional injury
5. Concussion and/or Mild Traumatic Brain Injury
6. All other injuries

Class 3: *“This class includes reported injury(ies) which are assumed to be non-minor and do not require a claimant undergo an serious impairment assessment.”*

The 21 injury types included in Class 3 are:

1. Neck Injury - WAD III
2. Neck Injury – WAD IV
3. Deceased
4. Spinal Cord Injury (SCI) Quadriplegia
5. Spinal Cord Injury (SCI) Paraplegia or Hemiplegia
6. Amputation- Major Member
7. Amputation- Other
8. Permanent Loss of a Sense
9. Internal Organ Injury
10. Fracture - Significant Weight-bearing
11. Permanent Disfigurement or Scarring
12. Post-Concussion Syndrome
13. Serious Lacerations
14. Serious Burns
15. Permanent Brain Injury
16. Back Injury Grade 3
17. Back Injury Grade 4
18. Knee Injury – non-minor
19. Shoulder Injury – non-minor
20. Other Joint Injury – non-minor
21. Temporomandibular joint (TMJ) dysfunction with jaw fracture

We consider that those claimants with one or more Class 1 injuries would be considered as “minor” and some portion of those claimants with one or more Class 2 injuries might also be considered as a “minor.” Given this, we consider 3 alternative definitions that provide a range of estimates of the percentage of claimants that could be considered as “minor.”

Oliver Wyman Definition 1

For Definition 1, we assume a claimant who suffered one or more of the eight Class 1 injury types, and no other injury types, would be considered a claimant subject to the MIR cap. There are 1,145 claimants, or 66% of all claimants that meet the criteria for Definition 1¹³.

Oliver Wyman Definition 2

For Definition 2, we include all claimants in Definition 1. Additionally, we include any claimant with one or more Class 1 and/or Class 2 injury types with a non-pecuniary loss amount of \$32,278 or less. Our \$32,278 limit on non-pecuniary loss amount is based on the average non-pecuniary loss amount (projected to the cost level for 2017) for all 1,741 claimants. There are 1,316 claimants, or 76% of all claimants, that meet the criteria for Definition 2.

As a sensitivity measure, we estimate that if we reduce this Definition 2 dollar limit by half, from \$32,278 to \$16,139, the percentage of claimants that may be subject to the MIR cap reduces from 76% to 70%. Further, as another sensitivity measure, if we remove our selected \$32,278 limit completely, and thereby select any claimant with a Class 1 or Class 2 injury type, the estimated percentage of claimants that may be subject to the MIR cap increases from 76% to 86%¹⁴.

Oliver Wyman Definition 3

For Definition 3, we include all claimants with one or more Class 1 and/or Class 2 injury types (but no Class 3 injury types) with a total settlement loss amount within the first 75% percentile of all claimants' total settlement amount (that is, \$60,876 or less). There are 1,228 claimants, or 71% of all claimants, that meet the criteria for Definition 3.

Based upon our assumptions, we estimate the percentage of claimants from the NL 2018 CCS that would be subject to a minor injury cap in Newfoundland and Labrador to range from 66% to 76%.

¹³ We add three claimants with no reported injury type, for a total of 1,148 claimants for Definition 1.

¹⁴ We show this for sensitivity purposes only and consider the 86% scenario highly unlikely.

5. Cost Impact of Proposed Cap

As we discussed in the prior section, the NL 2018 CCS collected data on the injuries suffered by each claimant upon which settlement amounts were paid. In addition, the amount paid under each head of damage (e.g., future loss of income, non-pecuniary, punitive damages, etc.) for each claimant was provided.

The focus of this study is the percentage reduction in the amount paid¹⁵ for the non-pecuniary loss for each claimant, as this is the head of damage that the Newfoundland and Labrador Government is considering capping if a claimant is determined to have suffered a minor injury as a result of the accident.

To estimate the percentage reduction on the average non-pecuniary loss for the Bodily Injury coverage for claimants with a minor injury, if the caps that are under consideration are introduced, we followed five steps:

1. identify the injury types that meet minor injury definition,
2. identify those claimants who, based on their injury description, would have been subject to the minor injury cap,
3. project the claim amount paid under each head of damage for each individual claimant to a common accident date of July 1, 2017,
4. calculate the percentage reduction in the projected indemnity claim amount if a cap had been applied on the non-pecuniary loss to those identified claimants subject to the minor injury cap,
5. calculate a percentage reduction to the allocated loss adjustment expense costs in consideration of a reduction due to the cap.

Steps 1 and 2

We discussed steps 1 and 2 in Section 4 of this report. As stated, we estimate that approximately 66% to 76% of the claimants may be considered to have suffered a minor injury.

Step 3

Based on our Newfoundland and Labrador Private Passenger Automobile Loss Trend Report as of June 30, 2017,¹⁶ which presents our study of the average year to year increase in claim

¹⁵ The amount paid for non-pecuniary loss is net of the current \$2,500 deductible.

¹⁶ See Directive A. I. 2018-02 at <http://www.pub.nf.ca/insurance.htm>

severity,¹⁷ we estimate an annual severity trend rate of 7% for Bodily Injury. We use this annual severity trend rate to project the paid claim costs of each claimant from the claimant’s date of loss to a common loss date of July 1, 2017.¹⁸

In aggregate, for all 1,741 claimants in the NL 2018 CCS, the total settlement amount before the adjustment for projection to a common date of July 1, 2017, is \$68.9 million; after projection, it is \$90.4 million.

Step 4

The Government of Newfoundland and Labrador is considering three alternative cap levels that would limit the amount paid for non-pecuniary loss to those claimants identified as having suffered a minor injury. These three alternative cap amounts are \$5,000, \$7,500 and \$10,000; these cap amounts would be indexed over time.

In the table below, using the Definitions 1, 2, and 3 to identify claimants subject to the cap (as discussed in Section 4), we present our estimate of the percentage reduction in the average total settlement amounts paid¹⁹ for the three cap levels that are under consideration for (1) the minor injury claimants only and (2) all claimants from the NL 2018 CCS:

Table 5: Percentage Reduction in Average Total Settlement Amounts

Average Total Settlement % Reduction	\$5,000 Cap	\$7,500 Cap	\$10,000 Cap
Minor Injury Claimants Only	59% - 60%	52% - 53%	44% - 47%
All Claimants	22% - 28%	19% - 25%	17% - 22%

As presented in the table above, for each \$2,500 increase in the cap amount, the percentage reduction to *current average total settlement* amount paid is approximately 7 to 8 percentage points for Minor Injury Claimants, and is approximately 2 to 3 percentage points for All Claimants.

The average total settlement percentage reduction is a larger percentage for the minor injury claimants than for all claimants, since claimants with a non-minor injury will not see any change in their total settlement amount with the MIRs under consideration.

¹⁷ “Claim severity” is average cost per claim.

¹⁸ For example, consider a hypothetical claim that occurred July 1, 2015 and had a settlement amount of \$10,000. After application of two years of severity trend, the projected cost (on a July 1, 2017 level) is \$11,449 (10,000 x 1.07 x 1.07).

¹⁹ The total settlement amounts are based on the current non-pecuniary loss net of the \$2,500 deductible.

In the table below, using Definitions 1, 2, and 3 to identify claimants subject to the cap (as discussed in Section 4), we present our estimated range of the percentage reduction in the *current non-pecuniary* amounts paid²⁰ for the three cap levels that are under consideration for (1) the minor injury claimants only and (2) all claimants in the NL 2018 CCS:

Table 6: Percentage Reduction in Average Non-Pecuniary Loss Amounts

Average Non-Pecuniary % Reduction	\$5,000 Cap	\$7,500 Cap	\$10,000 Cap
Minor Injury Claimants Only	77% - 80%	67% - 71%	57% - 63%
All Claimants	36% - 45%	31% - 39%	27% - 35%

Again, the non-pecuniary reduction is a larger percentage for the minor injury claimants than for all claimants, since claimants with a non-minor injury will not see any change in their non-pecuniary amount with the MIRs under consideration.

Step 5

As part of our review, we also assume that there will be some reduction to the claims handling expense costs with the introduction of a cap on non-pecuniary loss. These claims handling costs are referred to as allocated loss adjustment expenses (ALAE) and the ALAE costs for each of the 1,741 claimants are included in the NL 2018 CCS.

The average ALAE amount for all claimants in the NL 2018 CCS is \$2,227; we project this to a July 1, 2017 cost level of \$3,227 using the same severity trend rate of 7% discussed earlier. Based on our estimation of which claimants may be considered minor and non-minor, we estimate the (projected) ALAE to range from \$1,387 to \$1,676 for minor claimants and \$6,268 to \$8,029 for non-minor claimants.

Based on our judgment, we estimate there to be a 25% reduction in ALAE costs for minor claimants who would be subject to the cap. As a result, we estimate the projected ALAE for minor claimants would reduce by a range from \$347 to \$419; this reduction contributes to the overall reduction in costs including ALAE we present in Table 1.

We present all our calculations for these findings in the summary Exhibits 2, 3, 4 (Definition #1), 6, 7 ,8 (Definition #2) and 10, 11, 12 (Definition #3) included with this report, as well as a summary of our findings in the Introduction and Summary section of this report.

²⁰ The non-pecuniary amounts are based on the current non-pecuniary loss net of the \$2,500 deductible.

Sensitivity of Findings

Our estimate of the reduction in loss amounts based on the alternative cap amounts under consideration is *not sensitive* to the selected loss trend rate that we apply to project the claim costs for each claimant to a common date of July 1, 2017. For example, if the loss trend rate that we apply is reduced in half, from 7.0% to 3.5%, the reduction in the total settlement and ALAE amount for the \$5,000 cap based on Definition 1, changes from 24.3%²¹ to 24.4%. Similar small reductions are observed for the other cap amounts and definitions.

Our findings of the reduction in loss amounts fall within a relatively narrow range based on the definition criteria (Definition 1, 2 and 3) that we use to identify the claimants that are subject to the cap. For example, as presented in Table 1, we estimate the percentage reduction on the total settlement and ALAE amount for all claimants with a \$5,000 cap to be 24.3% under Definition 1, 26.7% under Definition 2, and 21.4% under Definition 3.

Reduction to Premiums

In order to calculate the commensurate reduction in the required average premiums based on the alternative cap amounts under consideration, we apply the percentage reduction in loss amounts (presented in Table 1) to our estimate of the accident year 2017 loss costs and adjustment expenses as presented in our report titled *Oliver Wyman NL Profit and Rate Adequacy Review* dated March 29, 2018. Our findings are summarized in Table 2 of this report, and the detailed calculations are presented in Exhibits 1 (Definition #1), 5 (Definition #2) and 9 (Definition #3) attached to this report.

²¹ See Table 1 in the Introduction and Summary section of this report.

6. Current Deductible & Amendments

As an alternative to introducing a cap on the non-pecuniary loss of claimants with a minor injury, the Newfoundland and Labrador Government is considering maintaining or increasing the current \$2,500 deductible on the non-pecuniary loss that is applied to *all claimants*.²²

We calculate the percentage reduction in total settlement costs if the current \$2,500 deductible on the non-pecuniary loss amount were increased (to \$5,000, \$7,500 or \$10,000) for all claimants in the NL 2018 CCS database. We apply the additional increase²³ in the deductible amount to the projected non-pecuniary amount paid²⁴ for each of the claimants in the NL 2018 CCS database.

Due to the nature of erosion of the deductible through the claims settlement negotiation process we temper these initial estimates by an erosion factor. While we are unable to quantify the erosion factor, based solely on our judgment, we apply the erosion factors of -15% and -25% to our initial estimates and present our estimated findings in the Table 7²⁵ below:

Table 7: Percentage Reduction in Total Settlement & ALAE Amounts

Total Settlement % Reduction	\$5,000 Deductible	\$7,500 Deductible	\$10,000 Deductible
All Claimants - No Erosion	4%	9%	13%
All Claimants - With Erosion	3% - 4%	6% - 7%	9% - 11%

To calculate the commensurate reduction in premiums based on the alternative cap amounts under consideration, we apply the percentage reduction in loss amounts (presented in Table 7) to our estimate of the accident year 2017 loss costs and adjustment expenses as presented in our report titled *Oliver Wyman NL Profit and Rate Adequacy Review* dated March 29, 2018. Our findings are summarized in Table 4 of this report and the detailed calculations are presented in Exhibit 13 attached to this report.

²² This is in contrast to the proposals being examined to cap non-pecuniary losses of only those *claimants with minor injuries*.

²³ The increase in the deductible that we apply is limited by the non-pecuniary loss amount that was actually paid. For example, if the non-pecuniary loss amount paid (net of the \$2,500 current deductible) was \$6,000 (for a total of \$8,500 gross of the deductible), we reduce this net non-pecuniary amount to \$3,500 for the \$5,000 deductible, to \$1,000 for the \$7,500 deductible, and to \$0 for the \$10,000 deductible.

²⁴ The non-pecuniary amounts are based on the current non-pecuniary loss net of the \$2,500 deductible; each claimant's costs have been projected to a common date of July 1, 2017.

²⁵ Our calculations for the reduction in premium(s) that we present in Table 7 above are presented in this report in Exhibits #14, 15, and 16.

7. Change in Claims Frequency Rate

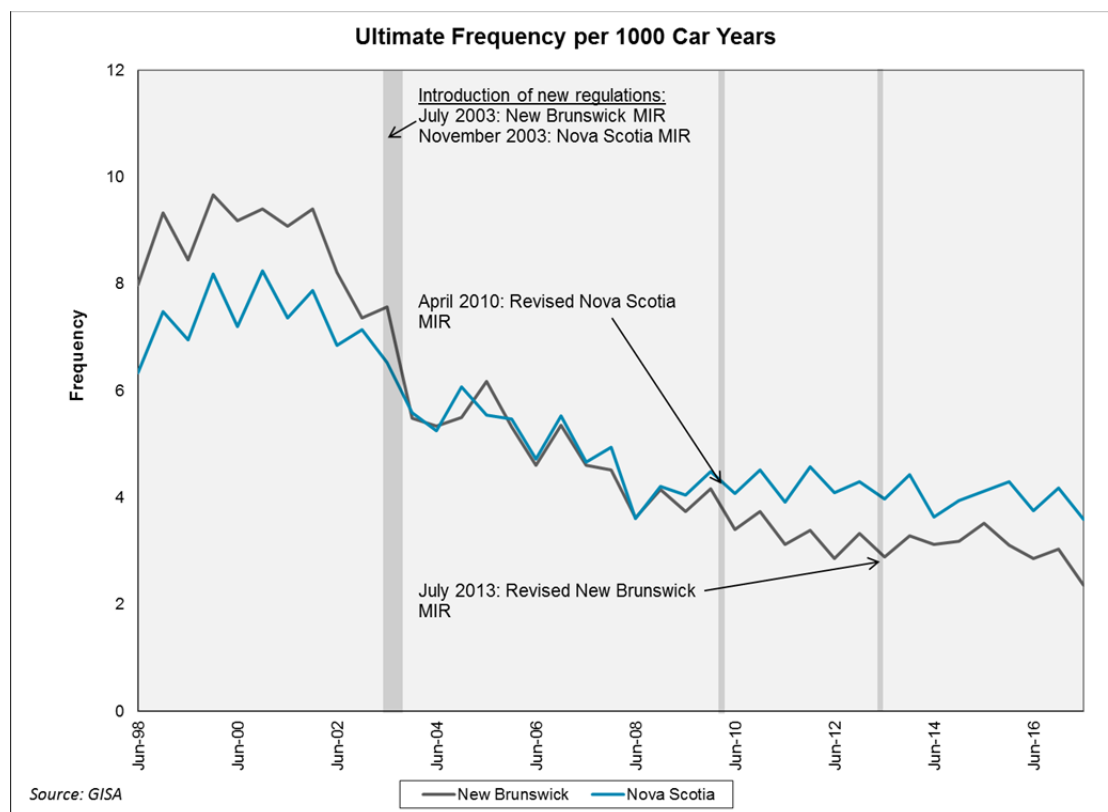
The introduction of a minor injury cap may influence the propensity to report and pursue a claim. It is reasonable to expect that there is a correlation between the cap amount and the likelihood that a claim is not reported; the lower the cap amount, the higher the likelihood the claim is not reported and pursued.

The number of claims as a percentage of all vehicles insured is referred to as the claims frequency rate. As the NL 2018 CCS is a database that represents a selected number of claimant records, it is not possible to estimate the impact a MIR would have on the Bodily Injury coverage frequency rate in Newfoundland and Labrador with the NL 2018 CCS database.

Therefore, we reviewed the most recent Industry-wide claim frequency rate (for each accident half year over the twenty-year period beginning in the second half of 1997 through the first half of 2017) provided by the General Insurance Statistical Agency (GISA) for Nova Scotia and New Brunswick.²⁶ As discussed in Section 2, these jurisdictions both introduced MIRs in 2003 and subsequently amended the MIR in Nova Scotia for claims occurring on or after April 28, 2010 and in New Brunswick for claims occurring on July 1, 2013.

The line graph below presents these Bodily Injury claim frequency rates for private passenger automobiles in New Brunswick and Nova Scotia over the twenty-year period. The frequency rate in each time period represents the number of claims that occurred during the time period for every 1,000 vehicles insured during that same time period. For example, the frequency rate during the time period “Dec 02” represents the number of claims/accidents that occurred during the time period July 1, 2002 to December 31, 2002 for every 1,000 vehicles insured in that same time period. Similarly, “June 03” represents the number of claims/accidents that occurred during the time period January 1, 2003 to June 30, 2003 for every 1,000 vehicles insured during that same time period.

²⁶ Due to low volume of vehicles insured, Prince Edward Island is not considered in this portion of the analysis.

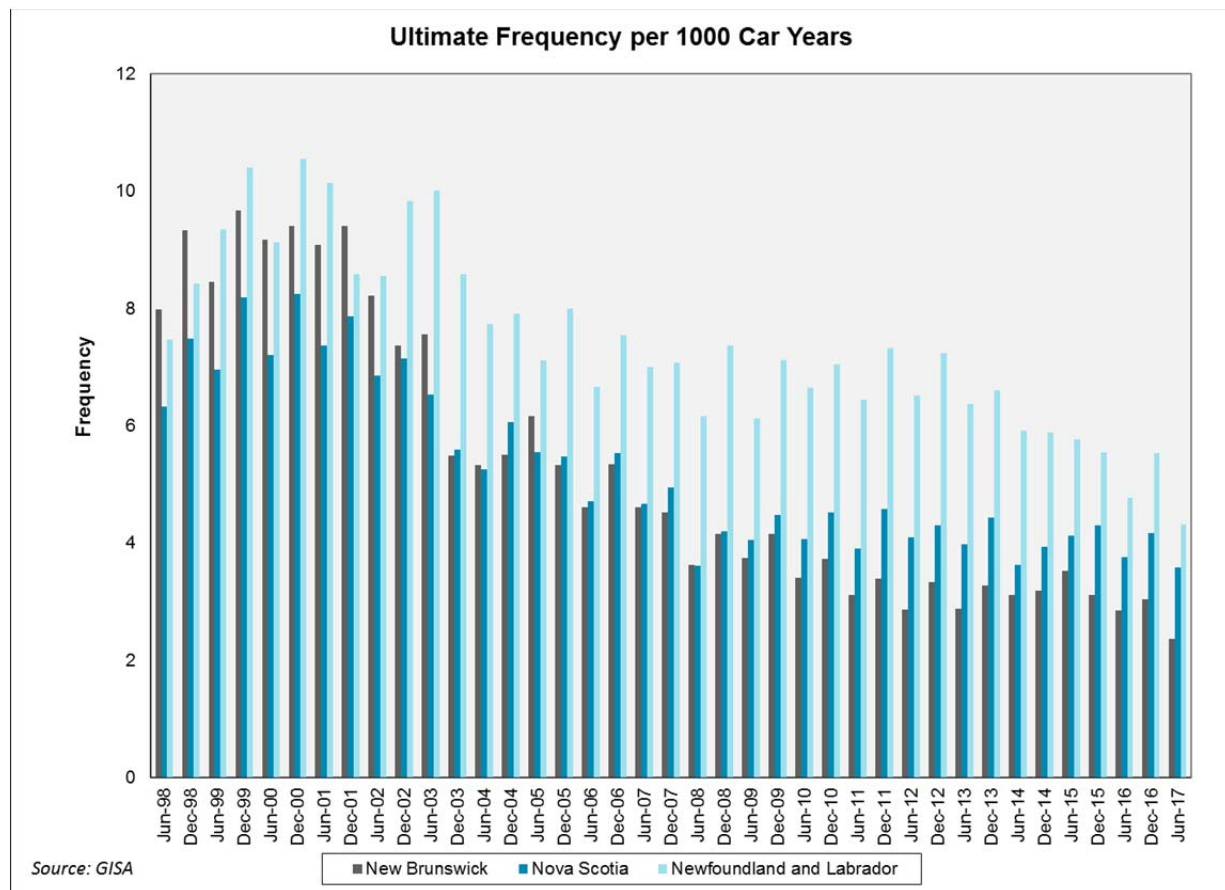


Based on the graph above, we observe the following:

- Subject to variability, both provinces have experienced declining frequency trends over the twenty-year period displayed.
- There are inflection points in the graphs that coincide with the introduction and amendment of MIR in each province:
 - Both provinces experienced a sharp decline in frequency in 2003, when the MIRs were introduced.
 - When the MIRs were revised in 2010 (Nova Scotia) and 2013 (New Brunswick) to increase the cap to a \$7,500 indexed level and modify the definition, the respective negative trends each flattened moderately.
 - The New Brunswick frequency rate was higher than Nova Scotia's prior to the 2003 MIR, similar to that of Nova Scotia's over the period 2003 to 2010, and then lower than Nova Scotia since its 2010 amendment. This may imply a perception that the current New Brunswick MIR definition is broader (i.e., a larger percentage of claimants are considered minor) than the Nova Scotia definition.

It is important to note that while the graph makes a strong case that the MIR affected the frequency level, there are many other factors that influenced the frequency level over this twenty-year period, and we therefore do not conclude that the frequency changes are fully attributable to MIR.

The following bar chart presents the same New Brunswick and Nova Scotia data, and also includes the Newfoundland and Labrador frequency data from the same twenty-year time period.



Based on this graph, we observe that:

- Newfoundland and Labrador has generally experienced higher frequency than the other two provinces displayed.
- The gap between Newfoundland and Labrador and the other two provinces widened when the other provinces introduced MIR.
- All three provinces have experienced declining frequency trends over the twenty-year period.

From the available data, it is difficult to determine the exact degree to which the MIR contributed to the decline in frequency that was observed in Nova Scotia and New Brunswick with the introduction of MIR. Similarly, it is difficult to determine the exact degree the amendments to the MIR in 2010 for Nova Scotia and 2013 for New Brunswick contributed to the change to a more flat frequency trend following the amendments. However, it is plausible that the MIR (and the amendments thereto) contributed, to some degree, to the changes in the observed Bodily Injury frequency rate in those two provinces since 2003.

Therefore, based on the experience in Nova Scotia and New Brunswick, we suggest it is reasonable to assume that a MIR cap may affect (reduce) the claim frequency level in Newfoundland and Labrador; and the lower the cap level, the more impact the cap may have on the frequency rate reduction.

Based on our judgment, we provide our findings of the cost impact of introducing a cap on the non-pecuniary loss amount for claimants with a minor injury assuming no change in the frequency rate, as well as a range of decreases in the claims frequency rate. We do so by judgmentally assuming the proportion of minor injury claimants would reduce by 5%, 10% or 15%. These assumptions are reflected in the tables presented earlier in this report.

8. Distribution and Use

- This report was prepared for the sole use of the Newfoundland and Labrador Board of Commissioners of Public Utilities (Board). All decisions in connection with the implementation or use of advice or recommendations contained in this report are the sole responsibility of the Board.
- Oliver Wyman's consent to any distribution of this report (whether herein or in the written agreement pursuant to which this report has been issued) to parties other than the Board does not constitute advice by Oliver Wyman to any such third parties and shall be solely for informational purposes and not for purposes of reliance by any such third parties. Oliver Wyman assumes no liability related to third party use of this report or any actions taken or decisions made as a consequence of the results, advice or recommendations set forth herein. This report should not replace the due diligence on behalf of any such third party.

9. Consideration of Limitations

- For our review, we relied on data and information available from GISA and IBC without independent audit. Though we have reviewed the data for reasonableness and consistency, we have not audited or otherwise verified this data. It should also be noted that our review of data may not always reveal imperfections. We have assumed that the data provided is both accurate and complete. The results of our analysis are dependent on this assumption. If this data or information is inaccurate or incomplete, our findings and conclusions may need to be revised.
- Our conclusions are based on an analysis of the data and on the estimation of the outcome of many contingent events. Future costs were developed from the historical claim experience and covered exposure, with adjustments for anticipated changes. Our estimates make no provision for extraordinary future emergence of new classes of losses or types of losses not sufficiently represented in historical databases or which are not yet quantifiable.
- While this analysis complies with applicable Actuarial Standards of Practice and Statements of Principles, users of this analysis should recognize that our projections involve estimates of future events, and are subject to economic and statistical variations from expected values. We have not anticipated any extraordinary changes to the legal, social, or economic environment that might affect the frequency or severity of claims. For these reasons, no assurance can be given that the emergence of actual losses will correspond to the projections in this analysis.



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Newfoundland and Labrador
Private Passenger Auto
Third Party Liability Bodily Injury - Closed Claims Study

**Oliver Wyman Minor Injury Definition 1
Savings on Bodily Injury Premium Summary
Forecast Accident Year 2017**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12) See Note	(13)
Industry Data Accident Year Ending June 30	Ultimate Loss & ALAE Cost/Car	ULAE Factor	Loss Trend Rate	Loss Trend Projection Factor	Claim Payment Pattern Factor	Delay in Receiving Premiums	General Expense	Premium Tax	Commission Expense	After Tax 10% ROE Profit Provision	Estimated Required Average Premium	Reduction in Required Average Premium
Assuming No Cap (No Change)												
2015	376.42	1.080	3%	1.077	0.897	1.007	48.1	5%	12.2%	5.74%	576	
2016	407.15	1.091	3%	1.045	0.897	1.007	48.1	5%	12.2%	5.74%	607	
2017	387.69	1.103	3%	1.015	0.897	1.007	45.8	5%	12.2%	5.74%	569	
Weighted Average: (20%/30%/50%)	391.27	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	582	
Non-Pecuniary Losses Capped at:												
0% Minor Injury Frequency Change												
\$5,000	296.06	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	455	(127)
\$7,500	306.56	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	469	(113)
\$10,000	316.36	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	482	(100)
Non-Pecuniary Losses Capped at:												
5% Minor Injury Frequency Change												
\$5,000	287.84	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	445	(138)
\$7,500	298.33	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	458	(124)
\$10,000	308.14	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	472	(111)
Non-Pecuniary Losses Capped at:												
10% Minor Injury Frequency Change												
\$5,000	279.62	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	434	(148)
\$7,500	290.11	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	448	(135)
\$10,000	299.92	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	461	(121)
Non-Pecuniary Losses Capped at:												
15% Minor Injury Frequency Change												
\$5,000	271.40	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	423	(159)
\$7,500	281.89	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	437	(145)
\$10,000	291.69	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	450	(132)
(14)	(15)	(16)	(17)	(18)								
Definition 1												
Estimated Savings on Required Average Premium Forecast Accident Year 2017												
Cap Amount												
Minor Injury												
Frequency Reduction	<u>0%</u>	<u>5%</u>	<u>10%</u>	<u>15%</u>								
\$5,000	(127)	(138)	(148)	(159)								
\$7,500	(113)	(124)	(135)	(145)								
\$10,000	(100)	(111)	(121)	(132)								

Note
 (2) for each row = "No Cap" weighted Ultimate Loss * Reform Factor from Exhibits 2, 3, and 4, Column (12) respectively
 (3) - (11): Weighted average from No Cap/No Change Section
 (12) = ((2) * (3) * (5) * (6)) / (((1) / (7)) - ((9) + (10) + (11))) See Oliver Wyman NL Profit and Rate Adequacy Review dated March 29, 2018.
 (13) = Capped Premium- No Cap/No change Premium

Newfoundland and Labrador
Private Passenger Auto
Third Party Liability Bodily Injury - Closed Claims Study

**Oliver Wyman Minor Injury Definition 1
Non-Pecuniary Losses capped at \$5,000**

(1)	(2)	(3)	(4)	(5)	(6)	(7) SUM((3):(6))	(8)	(9) 7 + 8
Category	Claim Count	Non Pecuniary Net of \$2,500 Deductible	Special Damages	General Damages excluding Non- Pecuniary	All Other	Total Net Indemnity	Allocated Loss Adjustment Expenses	Total Indemnity and ALAE
All Claimants (Before Cap)								
Reported Paid Amounts	1,741	43,886,852	8,517,658	13,416,551	3,087,368	68,908,429	3,877,645	72,786,074
Average Payment Before Cap & Trend		25,208	4,892	7,706	1,773	39,580	2,227	41,807
Total Paid Trended to 07/01/17 Settlement Date	1,741	56,195,585	11,585,971	18,386,692	4,205,607	90,373,856	5,617,519	95,991,375
Average Payment Before Cap		32,278	6,655	10,561	2,416	51,909	3,227	55,136
Non-Minor Claimants								
Total Paid Trended to 07/01/17 Settlement Date	593	27,665,438	8,116,205	13,735,928	2,414,839	51,932,410	3,717,026	55,649,436
Percentage of All Claimants	34%	49%	70%	75%	57%	57%	66%	58%
Average Payment Before Cap		46,653	13,687	23,163	4,072	87,576	6,268	93,844
Minor Claimants								
Total Paid Trended to 07/01/17 Settlement Date	1,148	28,530,147	3,469,766	4,650,764	1,790,768	38,441,446	1,900,493	40,341,939
Percentage of All Claimants	66%	51%	30%	25%	43%	43%	34%	42%
Average Payment Before Cap		24,852	3,022	4,051	1,560	33,486	1,655	35,141
Minor Claimants: Non-Pecuniary Losses Capped at \$5,000								
Total Paid Trended to 07/01/17 Settlement Date	1,148	5,647,689	3,469,766	4,650,764	1,790,768	15,558,987	1,425,370	16,984,357
Average Payment After Cap		4,920	3,022	4,051	1,560	13,553	1,242	14,795
Total Projected Savings		22,882,459	0	0	0	22,882,459	475,123	23,357,582
Total Percentage Savings		80.2%	0.0%	0.0%	0.0%	59.5%	25.0%	57.9%
Average Savings per Claimant		19,932	0	0	0	19,932	414	20,346
All Claimants (Post Cap)								
Total Paid Trended to 07/01/17 Settlement Date	1,741	33,313,127	11,585,971	18,386,692	4,205,607	67,491,397	5,142,396	72,633,793
Average Payment Before Cap		19,134	6,655	10,561	2,416	38,766	2,954	41,720
Total Percent Savings		40.7%	0.0%	0.0%	0.0%	25.3%	8.5%	24.3%
(10)	(11)	(12)						
Minor Injury Frequency Reduction	Total Savings	Percentage Savings						
0% Reduction	23,357,582	24.3%						
5% Reduction	25,374,679	26.4%						
10% Reduction	27,391,776	28.5%						
15% Reduction	29,408,873	30.6%						

Note

Special Damages includes past loss of employment income, past loss of other income, past medical / rehabilitation / care, past replacement services, and funeral expenses
General Damages excluding Non-Pecuniary includes future loss of employment income, future medical / rehabilitation / care, and future replacement services
All Other includes punitive damages, prejudgment interest, post-judgment interest, party and party costs, and auto no-fault (Section B) offset
ALAE includes legal fees (internal/external), independent (external) adjuster fees, and expert fees (including medical)

Newfoundland and Labrador
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**Oliver Wyman Minor Injury Definition 1
Non-Pecuniary Losses capped at \$7,500**

(1)	(2)	(3)	(4)	(5)	(6)	(7) SUM((3):(6))	(8)	(9) 7 + 8
Category	Claim Count	Non Pecuniary Net of \$2,500 Deductible	Special Damages	General Damages excluding Non- Pecuniary	All Other	Total Net Indemnity	Allocated Loss Adjustment Expenses	Total Indemnity and ALAE
All Claimants (Before Cap)								
Reported Paid Amounts	1,741	43,886,852	8,517,658	13,416,551	3,087,368	68,908,429	3,877,645	72,786,074
Average Payment Before Cap & Trend		25,208	4,892	7,706	1,773	39,580	2,227	41,807
Total Paid Trended to 07/01/17 Settlement Date	1,741	56,195,585	11,585,971	18,386,692	4,205,607	90,373,856	5,617,519	95,991,375
Average Payment Before Cap		32,278	6,655	10,561	2,416	51,909	3,227	55,136
Non-Minor Claimants								
Total Paid Trended to 07/01/17 Settlement Date	593	27,665,438	8,116,205	13,735,928	2,414,839	51,932,410	3,717,026	55,649,436
Percentage of All Claimants	34%	49%	70%	75%	57%	57%	66%	58%
Average Payment Before Cap		46,653	13,687	23,163	4,072	87,576	6,268	93,844
Minor Claimants								
Total Paid Trended to 07/01/17 Settlement Date	1,148	28,530,147	3,469,766	4,650,764	1,790,768	38,441,446	1,900,493	40,341,939
Percentage of All Claimants	66%	51%	30%	25%	43%	43%	34%	42%
Average Payment Before Cap		24,852	3,022	4,051	1,560	33,486	1,655	35,141
Minor Claimants: Non-Pecuniary Losses Capped at \$7,500								
Total Paid Trended to 07/01/17 Settlement Date	1,148	8,221,716	3,469,766	4,650,764	1,790,768	18,133,014	1,425,370	19,558,384
Average Payment After Cap		7,162	3,022	4,051	1,560	15,795	1,242	17,037
Total Projected Savings		20,308,432	0	0	0	20,308,432	475,123	20,783,555
Total Percentage Savings		71.2%	0.0%	0.0%	0.0%	52.8%	25.0%	51.5%
Average Savings per Claimant		17,690	0	0	0	17,690	414	18,104
All Claimants (Post Cap)								
Total Paid Trended to 07/01/17 Settlement Date	1,741	35,887,154	11,585,971	18,386,692	4,205,607	70,065,424	5,142,396	75,207,820
Average Payment Before Cap		20,613	6,655	10,561	2,416	40,244	2,954	43,198
Total Percent Savings		36.1%	0.0%	0.0%	0.0%	22.5%	8.5%	21.7%
(10)	(11)	(12)						
Minor Injury Frequency Reduction	Total Savings	Percentage Savings						
0% Reduction	20,783,555	21.7%						
5% Reduction	22,800,652	23.8%						
10% Reduction	24,817,749	25.9%						
15% Reduction	26,834,846	28.0%						

Note

Special Damages includes past loss of employment income, past loss of other income, past medical / rehabilitation / care, past replacement services, and funeral expenses
 General Damages excluding Non-Pecuniary includes future loss of employment income, future medical / rehabilitation / care, and future replacement services
 All Other includes punitive damages, prejudgment interest, post-judgment interest, party and party costs, and auto no-fault (Section B) offset
 ALAE includes legal fees (internal/external), independent (external) adjuster fees, and expert fees (including medical)

Newfoundland and Labrador
Private Passenger Auto
Third Party Liability Bodily Injury - Closed Claims Study

**Oliver Wyman Minor Injury Definition 1
Non-Pecuniary Losses capped at \$10,000**

(1) Category	(2) Claim Count	(3) Non Pecuniary Net of \$2,500 Deductible	(4) Special Damages	(5) General Damages excluding Non- Pecuniary	(6) All Other	(7) SUM((3):(6)) Total Net Indemnity	(8) Allocated Loss Adjustment Expenses	(9) 7 + 8 Total Indemnity and ALAE
All Claimants (Before Cap)								
Reported Paid Amounts	1,741	43,886,852	8,517,658	13,416,551	3,087,368	68,908,429	3,877,645	72,786,074
Average Payment Before Cap & Trend		25,208	4,892	7,706	1,773	39,580	2,227	41,807
Total Paid Trended to 07/01/17 Settlement Date	1,741	56,195,585	11,585,971	18,386,692	4,205,607	90,373,856	5,617,519	95,991,375
Average Payment Before Cap		32,278	6,655	10,561	2,416	51,909	3,227	55,136
Non-Minor Claimants								
Total Paid Trended to 07/01/17 Settlement Date	593	27,665,438	8,116,205	13,735,928	2,414,839	51,932,410	3,717,026	55,649,436
Percentage of All Claimants	34%	49%	70%	75%	57%	57%	66%	58%
Average Payment Before Cap		46,653	13,687	23,163	4,072	87,576	6,268	93,844
Minor Claimants								
Total Paid Trended to 07/01/17 Settlement Date	1,148	28,530,147	3,469,766	4,650,764	1,790,768	38,441,446	1,900,493	40,341,939
Percentage of All Claimants	66%	51%	30%	25%	43%	43%	34%	42%
Average Payment Before Cap		24,852	3,022	4,051	1,560	33,486	1,655	35,141
Minor Claimants: Non-Pecuniary Losses Capped at \$10,000								
Total Paid Trended to 07/01/17 Settlement Date	1,148	10,626,580	3,469,766	4,650,764	1,790,768	20,537,878	1,425,370	21,963,248
Average Payment After Cap		9,257	3,022	4,051	1,560	17,890	1,242	19,132
Total Projected Savings		17,903,568	0	0	0	17,903,568	475,123	18,378,691
Total Percentage Savings		62.8%	0.0%	0.0%	0.0%	46.6%	25.0%	45.6%
Average Savings per Claimant		15,595	0	0	0	15,595	414	16,009
All Claimants (Post Cap)								
Total Paid Trended to 07/01/17 Settlement Date	1,741	38,292,018	11,585,971	18,386,692	4,205,607	72,470,288	5,142,396	77,612,684
Average Payment Before Cap		21,994	6,655	10,561	2,416	41,626	2,954	44,579
Total Percent Savings		31.9%	0.0%	0.0%	0.0%	19.8%	8.5%	19.1%
(10) Minor Injury Frequency Reduction	(11) Total Savings	(12) Percentage Savings						
0% Reduction	18,378,691	19.1%						
5% Reduction	20,395,788	21.2%						
10% Reduction	22,412,885	23.3%						
15% Reduction	24,429,982	25.5%						

Note

Special Damages includes past loss of employment income, past loss of other income, past medical / rehabilitation / care, past replacement services, and funeral expenses
 General Damages excluding Non-Pecuniary includes future loss of employment income, future medical / rehabilitation / care, and future replacement services
 All Other includes punitive damages, prejudgment interest, post-judgment interest, party and party costs, and auto no-fault (Section B) offset
 ALAE includes legal fees (internal/external), independent (external) adjuster fees, and expert fees (including medical)

Newfoundland and Labrador
Private Passenger Auto
Third Party Liability Bodily Injury - Closed Claims Study

Oliver Wyman Minor Injury Definition 2
Savings on Bodily Injury Premium Summary
Forecast Accident Year 2017

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12) See Note	(13)
Industry Data Accident Year Ending June 30	Ultimate Loss & ALAE Cost/Car	ULAE Factor	Loss Trend Rate	Loss Trend Projection Factor	Claim Payment Pattern Factor	Delay in Receiving Premiums	General Expense	Premium Tax	Commission Expense	After Tax 10% ROE Profit Provision	Estimated Required Average Premium	Reduction in Required Average Premium
Assuming No Cap (No Change)												
2015	376.42	1.080	3%	1.077	0.897	1.007	48.1	5%	12.2%	5.74%	576	
2016	407.15	1.091	3%	1.045	0.897	1.007	48.1	5%	12.2%	5.74%	607	
2017	387.69	1.103	3%	1.015	0.897	1.007	45.8	5%	12.2%	5.74%	569	
Weighted Average: (20%/30%/50%)	391.27	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	582	
Non-Pecuniary Losses Capped at:												
0% Minor Injury Frequency Change												
\$5,000	286.71	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	443	(139)
\$7,500	298.76	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	459	(123)
\$10,000	309.99	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	474	(108)
Non-Pecuniary Losses Capped at:												
5% Minor Injury Frequency Change												
\$5,000	277.61	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	431	(151)
\$7,500	289.65	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	447	(135)
\$10,000	300.89	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	462	(120)
Non-Pecuniary Losses Capped at:												
10% Minor Injury Frequency Change												
\$5,000	268.50	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	419	(163)
\$7,500	280.54	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	435	(147)
\$10,000	291.78	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	450	(132)
Non-Pecuniary Losses Capped at:												
15% Minor Injury Frequency Change												
\$5,000	259.39	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	407	(175)
\$7,500	271.44	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	423	(159)
\$10,000	282.67	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	438	(144)
(14)	(15)	(16)	(17)	(18)								
Definition 2												
Estimated Savings on Required Average Premium Forecast Accident Year 2017												
Cap Amount												
Minor Injury												
Frequency Reduction	<u>0%</u>	<u>5%</u>	<u>10%</u>	<u>15%</u>								
\$5,000	(139)	(151)	(163)	(175)								
\$7,500	(123)	(135)	(147)	(159)								
\$10,000	(108)	(120)	(132)	(144)								

Note
 (2) for each row = "No Cap" weighted Ultimate Loss * Reform Factor from Exhibits 6, 7, and 8, Column (12) respectively
 (3) - (11): Weighted average from No Cap/No Change Section
 (12) = ((2) * (3) * (5) * (6)) / ((1 / (7)) - ((9) + (10) + (11))) See Oliver Wyman NL Profit and Rate Adequacy Review dated March 29, 2018.
 (13) = Capped Premium- No Cap/No change Premium

Newfoundland and Labrador
Private Passenger Auto
Third Party Liability Bodily Injury - Closed Claims Study

**Oliver Wyman Minor Injury Definition 2
Non-Pecuniary Losses capped at \$5,000**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Category	Claim Count	Non Pecuniary Net of \$2,500 Deductible	Special Damages	General Damages excluding Non- Pecuniary	All Other	Total Net Indemnity	Allocated Loss Adjustment Expenses	Total Indemnity and ALAE
All Claimants (Before Cap)								
Reported Paid Amounts	1,741	43,886,852	8,517,658	13,416,551	3,087,368	68,908,429	3,877,645	72,786,074
Average Payment Before Cap & Trend		25,208	4,892	7,706	1,773	39,580	2,227	41,807
Total Paid Trended to 07/01/17 Settlement Date	1,741	56,195,585	11,585,971	18,386,692	4,205,607	90,373,856	5,617,519	95,991,375
Average Payment Before Cap		32,278	6,655	10,561	2,416	51,909	3,227	55,136
Non-Minor Claimants								
Total Paid Trended to 07/01/17 Settlement Date	425	24,617,029	7,809,230	13,232,564	2,237,187	47,896,011	3,412,162	51,308,173
Percentage of All Claimants	24%	44%	67%	72%	53%	53%	61%	53%
Average Payment Before Cap		57,922	18,375	31,135	5,264	112,696	8,029	120,725
Minor Claimants								
Total Paid Trended to 07/01/17 Settlement Date	1,316	31,578,556	3,776,741	5,154,128	1,968,420	42,477,845	2,205,357	44,683,202
Percentage of All Claimants	76%	56%	33%	28%	47%	47%	39%	47%
Average Payment Before Cap		23,996	2,870	3,917	1,496	32,278	1,676	33,954
Minor Claimants: Non-Pecuniary Losses Capped at \$5,000								
Total Paid Trended to 07/01/17 Settlement Date	1,316	6,478,209	3,776,741	5,154,128	1,968,420	17,377,498	1,654,018	19,031,516
Average Payment After Cap		4,923	2,870	3,917	1,496	13,205	1,257	14,462
Total Projected Savings		25,100,347	0	0	0	25,100,347	551,339	25,651,686
Total Percentage Savings		79.5%	0.0%	0.0%	0.0%	59.1%	25.0%	57.4%
Average Savings per Claimant		19,073	0	0	0	19,073	419	19,492
All Claimants (Post Cap)								
Total Paid Trended to 07/01/17 Settlement Date	1,741	31,095,238	11,585,971	18,386,692	4,205,607	65,273,509	5,066,180	70,339,689
Average Payment Before Cap		17,861	6,655	10,561	2,416	37,492	2,910	40,402
Total Percent Savings		44.7%	0.0%	0.0%	0.0%	27.8%	9.8%	26.7%
(10)	(11)	(12)						
Minor Injury Frequency Reduction	Total Savings	Percentage Savings						
0% Reduction	25,651,686	26.7%						
5% Reduction	27,885,847	29.1%						
10% Reduction	30,120,007	31.4%						
15% Reduction	32,354,167	33.7%						

Note

Special Damages includes past loss of employment income, past loss of other income, past medical / rehabilitation / care, past replacement services, and funeral expenses
 General Damages excluding Non-Pecuniary includes future loss of employment income, future medical / rehabilitation / care, and future replacement services
 All Other includes punitive damages, prejudgment interest, post-judgment interest, party and party costs, and auto no-fault (Section B) offset
 ALAE includes legal fees (internal/external), independent (external) adjuster fees, and expert fees (including medical)

Newfoundland and Labrador
Private Passenger Auto
Third Party Liability Bodily Injury - Closed Claims Study

**Oliver Wyman Minor Injury Definition 2
Non-Pecuniary Losses capped at \$7,500**

(1)	(2)	(3)	(4)	(5)	(6)	(7) SUM((3):(6))	(8)	(9) 7 + 8
Category	Claim Count	Non Pecuniary Net of \$2,500 Deductible	Special Damages	General Damages excluding Non- Pecuniary	All Other	Total Net Indemnity	Allocated Loss Adjustment Expenses	Total Indemnity and ALAE
All Claimants (Before Cap)								
Reported Paid Amounts	1,741	43,886,852	8,517,658	13,416,551	3,087,368	68,908,429	3,877,645	72,786,074
Average Payment Before Cap & Trend		25,208	4,892	7,706	1,773	39,580	2,227	41,807
Total Paid Trended to 07/01/17 Settlement Date	1,741	56,195,585	11,585,971	18,386,692	4,205,607	90,373,856	5,617,519	95,991,375
Average Payment Before Cap		32,278	6,655	10,561	2,416	51,909	3,227	55,136
Non-Minor Claimants								
Total Paid Trended to 07/01/17 Settlement Date	425	24,617,029	7,809,230	13,232,564	2,237,187	47,896,011	3,412,162	51,308,173
Percentage of All Claimants	24%	44%	67%	72%	53%	53%	61%	53%
Average Payment Before Cap		57,922	18,375	31,135	5,264	112,696	8,029	120,725
Minor Claimants								
Total Paid Trended to 07/01/17 Settlement Date	1,316	31,578,556	3,776,741	5,154,128	1,968,420	42,477,845	2,205,357	44,683,202
Percentage of All Claimants	76%	56%	33%	28%	47%	47%	39%	47%
Average Payment Before Cap		23,996	2,870	3,917	1,496	32,278	1,676	33,954
Minor Claimants: Non-Pecuniary Losses Capped at \$7,500								
Total Paid Trended to 07/01/17 Settlement Date	1,316	9,432,815	3,776,741	5,154,128	1,968,420	20,332,104	1,654,018	21,986,122
Average Payment After Cap		7,168	2,870	3,917	1,496	15,450	1,257	16,707
Total Projected Savings		22,145,741	0	0	0	22,145,741	551,339	22,697,080
Total Percentage Savings		70.1%	0.0%	0.0%	0.0%	52.1%	25.0%	50.8%
Average Savings per Claimant		16,828	0	0	0	16,828	419	17,247
All Claimants (Post Cap)								
Total Paid Trended to 07/01/17 Settlement Date	1,741	34,049,844	11,585,971	18,386,692	4,205,607	68,228,115	5,066,180	73,294,295
Average Payment Before Cap		19,558	6,655	10,561	2,416	39,189	2,910	42,099
Total Percent Savings		39.4%	0.0%	0.0%	0.0%	24.5%	9.8%	23.6%
(10)	(11)	(12)						
Minor Injury Frequency Reduction	Total Savings	Percentage Savings						
0% Reduction	22,697,080	23.6%						
5% Reduction	24,931,240	26.0%						
10% Reduction	27,165,400	28.3%						
15% Reduction	29,399,560	30.6%						

Note

Special Damages includes past loss of employment income, past loss of other income, past medical / rehabilitation / care, past replacement services, and funeral expenses
 General Damages excluding Non-Pecuniary includes future loss of employment income, future medical / rehabilitation / care, and future replacement services
 All Other includes punitive damages, prejudgment interest, post-judgment interest, party and party costs, and auto no-fault (Section B) offset
 ALAE includes legal fees (internal/external), independent (external) adjuster fees, and expert fees (including medical)

Newfoundland and Labrador
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**Oliver Wyman Minor Injury Definition 2
Non-Pecuniary Losses capped at \$10,000**

(1)	(2)	(3)	(4)	(5)	(6)	(7) SUM((3):(6))	(8)	(9) 7 + 8
Category	Claim Count	Non Pecuniary Net of \$2,500 Deductible	Special Damages	General Damages excluding Non- Pecuniary	All Other	Total Net Indemnity	Allocated Loss Adjustment Expenses	Total Indemnity and ALAE
All Claimants (Before Cap)								
Reported Paid Amounts	1,741	43,886,852	8,517,658	13,416,551	3,087,368	68,908,429	3,877,645	72,786,074
Average Payment Before Cap & Trend		25,208	4,892	7,706	1,773	39,580	2,227	41,807
Total Paid Trended to 07/01/17 Settlement Date	1,741	56,195,585	11,585,971	18,386,692	4,205,607	90,373,856	5,617,519	95,991,375
Average Payment Before Cap		32,278	6,655	10,561	2,416	51,909	3,227	55,136
Non-Minor Claimants								
Total Paid Trended to 07/01/17 Settlement Date	425	24,617,029	7,809,230	13,232,564	2,237,187	47,896,011	3,412,162	51,308,173
Percentage of All Claimants	24%	44%	67%	72%	53%	53%	61%	53%
Average Payment Before Cap		57,922	18,375	31,135	5,264	112,696	8,029	120,725
Minor Claimants								
Total Paid Trended to 07/01/17 Settlement Date	1,316	31,578,556	3,776,741	5,154,128	1,968,420	42,477,845	2,205,357	44,683,202
Percentage of All Claimants	76%	56%	33%	28%	47%	47%	39%	47%
Average Payment Before Cap		23,996	2,870	3,917	1,496	32,278	1,676	33,954
Minor Claimants: Non-Pecuniary Losses Capped at \$10,000								
Total Paid Trended to 07/01/17 Settlement Date	1,316	12,189,164	3,776,741	5,154,128	1,968,420	23,088,454	1,654,018	24,742,471
Average Payment After Cap		9,262	2,870	3,917	1,496	17,544	1,257	18,801
Total Projected Savings		19,389,392	0	0	0	19,389,392	551,339	19,940,731
Total Percentage Savings		61.4%	0.0%	0.0%	0.0%	45.6%	25.0%	44.6%
Average Savings per Claimant		14,734	0	0	0	14,734	419	15,153
All Claimants (Post Cap)								
Total Paid Trended to 07/01/17 Settlement Date	1,741	36,806,194	11,585,971	18,386,692	4,205,607	70,984,464	5,066,180	76,050,644
Average Payment Before Cap		21,141	6,655	10,561	2,416	40,772	2,910	43,682
Total Percent Savings		34.5%	0.0%	0.0%	0.0%	21.5%	9.8%	20.8%
(10)	(11)	(12)						
Minor Injury Frequency Reduction	Total Savings	Percentage Savings						
0% Reduction	19,940,731	20.8%						
5% Reduction	22,174,891	23.1%						
10% Reduction	24,409,051	25.4%						
15% Reduction	26,643,211	27.8%						

Note

Special Damages includes past loss of employment income, past loss of other income, past medical / rehabilitation / care, past replacement services, and funeral expenses
 General Damages excluding Non-Pecuniary includes future loss of employment income, future medical / rehabilitation / care, and future replacement services
 All Other includes punitive damages, prejudgment interest, post-judgment interest, party and party costs, and auto no-fault (Section B) offset
 ALAE includes legal fees (internal/external), independent (external) adjuster fees, and expert fees (including medical)

Newfoundland and Labrador
Private Passenger Auto
Third Party Liability Bodily Injury - Closed Claims Study

Amended May 17, 2018

Oliver Wyman Minor Injury Definition 3
Savings on Bodily Injury Premium Summary
Forecast Accident Year 2017

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12) See Note	(13)
Industry Data Accident Year Ending June 30	Ultimate Loss & ALAE Cost/Car	ULAE Factor	Loss Trend Rate	Loss Trend Projection Factor	Claim Payment Pattern Factor	Delay in Receiving Premiums	General Expense	Premium Tax	Commission Expense	After Tax 10% ROE Profit Provision	Estimated Required Average Premium	Reduction in Required Average Premium
Assuming No Cap (No Change)												
2015	376.42	1.080	3%	1.077	0.897	1.007	48.1	5%	12.2%	5.74%	576	
2016	407.15	1.091	3%	1.045	0.897	1.007	48.1	5%	12.2%	5.74%	607	
2017	387.69	1.103	3%	1.015	0.897	1.007	45.8	5%	12.2%	5.74%	569	
Weighted Average: (20%/30%/50%)	391.27	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	582	
Non-Pecuniary Losses Capped at:												
0% Minor Injury Frequency Change												
\$5,000	307.39	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	471	(112)
\$7,500	318.54	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	485	(97)
\$10,000	328.88	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	499	(83)
Non-Pecuniary Losses Capped at:												
5% Minor Injury Frequency Change												
\$5,000	300.22	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	461	(121)
\$7,500	311.36	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	476	(106)
\$10,000	321.70	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	490	(92)
Non-Pecuniary Losses Capped at:												
10% Minor Injury Frequency Change												
\$5,000	293.04	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	451	(131)
\$7,500	304.19	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	466	(116)
\$10,000	314.53	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	480	(102)
Non-Pecuniary Losses Capped at:												
15% Minor Injury Frequency Change												
\$5,000	285.87	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	442	(140)
\$7,500	297.02	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	457	(125)
\$10,000	307.35	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	471	(112)
(14)	(15)	(16)	(17)	(18)								
Definition 3												
Estimated Savings on Required Average Premium Forecast Accident Year 2017												
Cap Amount												
Minor Injury												
Frequency Reduction	0%	5%	10%	15%								
\$5,000	(112)	(121)	(131)	(140)								
\$7,500	(97)	(106)	(116)	(125)								
\$10,000	(83)	(92)	(102)	(112)								

Note

- (2) for each row = "No Cap" weighted Ultimate Loss * Reform Factor from Exhibits 10, 11, and 12, Column (12) respectively
- (3) - (11): Weighted average from No Cap/No Change Section
- (12) = ((2) * (3) * (5) * (6) + (8) * (9) + (10) + (11)) See Oliver Wyman NL Profit and Rate Adequacy Review dated March 29, 2018.
- (13) = Capped Premium- No Cap/No change Premium

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Private Passenger Auto
Third Party Liability Bodily Injury - Closed Claims Study

Amended May 17, 2018

**Oliver Wyman Minor Injury Definition 3
Non-Pecuniary Losses capped at \$5,000**

(1) Category	(2) Claim Count	(3) Non Pecuniary Net of \$2,500 Deductible	(4) Special Damages	(5) General Damages excluding Non- Pecuniary	(6) All Other	(7) SUM((3):(6)) Total Net Indemnity	(8) Allocated Loss Adjustment Expenses	(9) 7 + 8 Total Indemnity and ALAE
All Claimants (Before Cap)								
Reported Paid Amounts	1,741	43,886,852	8,517,658	13,416,551	3,087,368	68,908,429	3,877,645	72,786,074
Average Payment Before Cap & Trend		25,208	4,892	7,706	1,773	39,580	2,227	41,807
Total Paid Trended to 07/01/17 Settlement Date	1,741	56,195,585	11,585,971	18,386,692	4,205,607	90,373,856	5,617,519	95,991,375
Average Payment Before Cap		32,278	6,655	10,561	2,416	51,909	3,227	55,136
Non-Minor Claimants								
Total Paid Trended to 07/01/17 Settlement Date	513	30,004,621	9,024,741	15,006,563	2,838,077	56,874,002	3,914,475	60,788,476
Percentage of All Claimants	29%	53%	78%	82%	67%	63%	70%	63%
Average Payment Before Cap		58,489	17,592	29,253	5,532	110,866	7,631	118,496
Minor Claimants								
Total Paid Trended to 07/01/17 Settlement Date	1,228	26,190,964	2,561,231	3,380,130	1,367,530	33,499,855	1,703,044	35,202,899
Percentage of All Claimants	71%	47%	22%	18%	33%	37%	30%	37%
Average Payment Before Cap		21,328	2,086	2,753	1,114	27,280	1,387	28,667
Minor Claimants: Non-Pecuniary Losses Capped at \$5,000								
Total Paid Trended to 07/01/17 Settlement Date	1,228	6,038,209	2,561,231	3,380,130	1,367,530	13,347,099	1,277,283	14,624,382
Average Payment After Cap		4,917	2,086	2,753	1,114	10,869	1,040	11,909
Total Projected Savings		20,152,755	0	0	0	20,152,755	425,761	20,578,516
Total Percentage Savings		76.9%	0.0%	0.0%	0.0%	60.2%	25.0%	58.5%
Average Savings per Claimant		16,411	0	0	0	16,411	347	16,758
All Claimants (Post Cap)								
Total Paid Trended to 07/01/17 Settlement Date	1,741	36,042,830	11,585,971	18,386,692	4,205,607	70,221,101	5,191,758	75,412,859
Average Payment Before Cap		20,702	6,655	10,561	2,416	40,334	2,982	43,316
Total Percent Savings		35.9%	0.0%	0.0%	0.0%	22.3%	7.6%	21.4%

(10) Minor Injury Frequency Reduction	(11) Total Savings	(12) Percentage Savings
0% Reduction	20,578,516	21.4%
5% Reduction	22,338,661	23.3%
10% Reduction	24,098,806	25.1%
15% Reduction	25,858,951	26.9%

Note

Special Damages includes past loss of employment income, past loss of other income, past medical / rehabilitation / care, past replacement services, and funeral expenses
General Damages excluding Non-Pecuniary includes future loss of employment income, future medical / rehabilitation / care, and future replacement services
All Other includes punitive damages, prejudgment interest, post-judgment interest, party and party costs, and auto no-fault (Section B) offset
ALAE includes legal fees (internal/external), independent (external) adjuster fees, and expert fees (including medical)

Newfoundland and Labrador
Private Passenger Auto
Third Party Liability Bodily Injury - Closed Claims Study

Amended May 17, 2018

**Oliver Wyman Minor Injury Definition 3
Non-Pecuniary Losses capped at \$7,500**

(1)	(2)	(3)	(4)	(5)	(6)	(7) SUM((3):(6))	(8)	(9) 7 + 8
Category	Claim Count	Non Pecuniary Net of \$2,500 Deductible	Special Damages	General Damages excluding Non- Pecuniary	All Other	Total Net Indemnity	Allocated Loss Adjustment Expenses	Total Indemnity and ALAE
All Claimants (Before Cap)								
Reported Paid Amounts	1,741	43,886,852	8,517,658	13,416,551	3,087,368	68,908,429	3,877,645	72,786,074
Average Payment Before Cap & Trend		25,208	4,892	7,706	1,773	39,580	2,227	41,807
Total Paid Trended to 07/01/17 Settlement Date	1,741	56,195,585	11,585,971	18,386,692	4,205,607	90,373,856	5,617,519	95,991,375
Average Payment Before Cap		32,278	6,655	10,561	2,416	51,909	3,227	55,136
Non-Minor Claimants								
Total Paid Trended to 07/01/17 Settlement Date	513	30,004,621	9,024,741	15,006,563	2,838,077	56,874,002	3,914,475	60,788,476
Percentage of All Claimants	29%	53%	78%	82%	67%	63%	70%	63%
Average Payment Before Cap		58,489	17,592	29,253	5,532	110,866	7,631	118,496
Minor Claimants								
Total Paid Trended to 07/01/17 Settlement Date	1,228	26,190,964	2,561,231	3,380,130	1,367,530	33,499,855	1,703,044	35,202,899
Percentage of All Claimants	71%	47%	22%	18%	33%	37%	30%	37%
Average Payment Before Cap		21,328	2,086	2,753	1,114	27,280	1,387	28,667
Minor Claimants: Non-Pecuniary Losses Capped at \$7,500								
Total Paid Trended to 07/01/17 Settlement Date	1,228	8,772,815	2,561,231	3,380,130	1,367,530	16,081,705	1,277,283	17,358,989
Average Payment After Cap		7,144	2,086	2,753	1,114	13,096	1,040	14,136
Total Projected Savings		17,418,149	0	0	0	17,418,149	425,761	17,843,910
Total Percentage Savings		66.5%	0.0%	0.0%	0.0%	52.0%	25.0%	50.7%
Average Savings per Claimant		14,184	0	0	0	14,184	347	14,531
All Claimants (Post Cap)								
Total Paid Trended to 07/01/17 Settlement Date	1,741	38,777,436	11,585,971	18,386,692	4,205,607	72,955,707	5,191,758	78,147,465
Average Payment Before Cap		22,273	6,655	10,561	2,416	41,904	2,982	44,887
Total Percent Savings		31.0%	0.0%	0.0%	0.0%	19.3%	7.6%	18.6%
(10)	(11)	(12)						
Minor Injury Frequency Reduction	Total Savings	Percentage Savings						
0% Reduction	17,843,910	18.6%						
5% Reduction	19,604,055	20.4%						
10% Reduction	21,364,200	22.3%						
15% Reduction	23,124,345	24.1%						

Note

Special Damages includes past loss of employment income, past loss of other income, past medical / rehabilitation / care, past replacement services, and funeral expenses
 General Damages excluding Non-Pecuniary includes future loss of employment income, future medical / rehabilitation / care, and future replacement services
 All Other includes punitive damages, prejudgment interest, post-judgment interest, party and party costs, and auto no-fault (Section B) offset
 ALAE includes legal fees (internal/external), independent (external) adjuster fees, and expert fees (including medical)

Newfoundland and Labrador
Private Passenger Auto
Third Party Liability Bodily Injury - Closed Claims Study

Amended May 17, 2018

**Oliver Wyman Minor Injury Definition 3
Non-Pecuniary Losses capped at \$10,000**

(1)	(2)	(3)	(4)	(5)	(6)	(7) SUM((3):(6))	(8)	(9) 7 + 8
Category	Claim Count	Non Pecuniary Net of \$2,500 Deductible	Special Damages	General Damages excluding Non- Pecuniary	All Other	Total Net Indemnity	Allocated Loss Adjustment Expenses	Total Indemnity and ALAE
All Claimants (Before Cap)								
Reported Paid Amounts	1,741	43,886,852	8,517,658	13,416,551	3,087,368	68,908,429	3,877,645	72,786,074
Average Payment Before Cap & Trend		25,208	4,892	7,706	1,773	39,580	2,227	41,807
Total Paid Trended to 07/01/17 Settlement Date	1,741	56,195,585	11,585,971	18,386,692	4,205,607	90,373,856	5,617,519	95,991,375
Average Payment Before Cap		32,278	6,655	10,561	2,416	51,909	3,227	55,136
Non-Minor Claimants								
Total Paid Trended to 07/01/17 Settlement Date	513	30,004,621	9,024,741	15,006,563	2,838,077	56,874,002	3,914,475	60,788,476
Percentage of All Claimants	29%	53%	78%	82%	67%	63%	70%	63%
Average Payment Before Cap		58,489	17,592	29,253	5,532	110,866	7,631	118,496
Minor Claimants								
Total Paid Trended to 07/01/17 Settlement Date	1,228	26,190,964	2,561,231	3,380,130	1,367,530	33,499,855	1,703,044	35,202,899
Percentage of All Claimants	71%	47%	22%	18%	33%	37%	30%	37%
Average Payment Before Cap		21,328	2,086	2,753	1,114	27,280	1,387	28,667
Minor Claimants: Non-Pecuniary Losses Capped at \$10,000								
Total Paid Trended to 07/01/17 Settlement Date	1,228	11,309,164	2,561,231	3,380,130	1,367,530	18,618,055	1,277,283	19,895,338
Average Payment After Cap		9,209	2,086	2,753	1,114	15,161	1,040	16,201
Total Projected Savings		14,881,800	0	0	0	14,881,800	425,761	15,307,561
Total Percentage Savings		56.8%	0.0%	0.0%	0.0%	44.4%	25.0%	43.5%
Average Savings per Claimant		12,119	0	0	0	12,119	347	12,465
All Claimants (Post Cap)								
Total Paid Trended to 07/01/17 Settlement Date	1,741	41,313,786	11,585,971	18,386,692	4,205,607	75,492,056	5,191,758	80,683,814
Average Payment Before Cap		23,730	6,655	10,561	2,416	43,361	2,982	46,343
Total Percent Savings		26.5%	0.0%	0.0%	0.0%	16.5%	7.6%	15.9%
(10)	(11)	(12)						
Minor Injury Frequency Reduction	Total Savings	Percentage Savings						
0% Reduction	15,307,561	15.9%						
5% Reduction	17,067,706	17.8%						
10% Reduction	18,827,851	19.6%						
15% Reduction	20,587,996	21.4%						

Note

Special Damages includes past loss of employment income, past loss of other income, past medical / rehabilitation / care, past replacement services, and funeral expenses
General Damages excluding Non-Pecuniary includes future loss of employment income, future medical / rehabilitation / care, and future replacement services
All Other includes punitive damages, prejudgment interest, post-judgment interest, party and party costs, and auto no-fault (Section B) offset
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Newfoundland and Labrador
Private Passenger Auto
Third Party Liability Bodily Injury - Closed Claims Study

Deductible Options
Savings on Bodily Injury Premium Summary
Forecast Accident Year 2017

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12) See Note	(13)
Industry Data Accident Year Ending June 30	Ultimate Loss & ALAE Cost/Car	ULAE Factor	Loss Trend Rate	Loss Trend Projection Factor	Claim Payment Pattern Factor	Delay in Receiving Premiums	General Expense	Premium Tax	Commission Expense	After Tax 10% ROE Profit Provision	Estimated Required Average Premium	Reduction in Required Average Premium
Assuming \$2,500 Deductible (No Change)												
2015	376.42	1.080	3%	1.077	0.897	1.007	48.1	5%	12.2%	5.74%	576	
2016	407.15	1.091	3%	1.045	0.897	1.007	48.1	5%	12.2%	5.74%	607	
2017	387.69	1.103	3%	1.015	0.897	1.007	45.8	5%	12.2%	5.74%	569	
Weighted Average: (20%/30%/50%)	391.27	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	582	
Deductible:												
\$5,000	373.99	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	559	(23)
\$7,500	357.67	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	537	(45)
\$10,000	342.18	1.095	3%	1.036	0.897	1.007	47.0	5%	12.2%	5.74%	517	(65)
(14)	(15)	(16)	(17)									
Estimated Savings on Required Average Premium Forecast Accident Year 2017												
Deductible												
Erosion Percentage	<u>0%</u>	<u>15%</u>	<u>25%</u>									
\$5,000	(23)	(19)	(17)									
\$7,500	(45)	(38)	(33)									
\$10,000	(65)	(55)	(49)									

Note

- (2) for each row = "No Change" weighted Ultimate loss * Reform Factor from Exhibits 14, 15, and 16, Column (9) respectively
 (3) - (11): Weighted average from No Change Section
 (12) = (((2) * (3) * (5) * (6)) + (8)) / ((1 / (7)) - ((9) + (10) + (11))) See Oliver Wyman NL Profit and Rate Adequacy Review dated March 29, 2018.
 (13) = No Change Premium- New Deductible Premium

Newfoundland and Labrador
Private Passenger Auto
Third Party Liability Bodily Injury - Closed Claims Study

\$5,000 Deductible Savings Summary

(1) Category	(2) Claim Count	(3) Non Pecuniary Net of \$2,500 Deductible	(4) Special Damages	(5) General Damages excluding Non- Pecuniary	(6) All Other	(7) SUM((3):(6)) Total Net Indemnity	(8) Allocated Loss Adjustment Expenses	(9) 7 +8 Total Indemnity and ALAE
All Claimants (net of \$2,500 Deductible)								
Reported Paid Amounts	1,741	43,886,852	8,517,658	13,416,551	3,087,368	68,908,429	3,877,645	72,786,074
Average Payment Post \$2,500 Deductible		25,208	4,892	7,706	1,773	39,580	2,227	41,807
Total Paid Trended to 07/01/17 Settlement Date	1,741	56,195,585	11,585,971	18,386,692	4,205,607	90,373,856	5,617,519	95,991,375
Average Payment Post \$2,500 Deductible		32,278	6,655	10,561	2,416	51,909	3,227	55,136
All Claimants (net of \$5,000 Deductible)								
Total Paid Trended to 07/01/17 Settlement Date	1,741	51,954,876	11,585,971	18,386,692	4,205,607	86,133,147	5,617,519	91,750,666
Average Payment Post \$5,000 Deductible		29,842	6,655	10,561	2,416	49,473	3,227	52,700
Total Projected Savings		4,240,709	0	0	0	4,240,709	0	4,240,709
Total Percent Savings		7.5%	0.0%	0.0%	0.0%	4.7%	0.0%	4.4%
Average Savings per Claimant		2,436	0	0	0	2,436	0	2,436

Note

Special Damages includes past loss of employment income, past loss of other income, past medical / rehabilitation / care, past replacement services, and funeral expenses
 General Damages excluding Non-Pecuniary includes future loss of employment income, future medical / rehabilitation / care, and future replacement services
 All Other includes punitive damages, prejudgment interest, post-judgment interest, party and party costs, and auto no-fault (Section B) offset
 ALAE includes legal fees (internal/external), independent (external) adjuster fees, and expert fees (including medical)

Newfoundland and Labrador
Private Passenger Auto
Third Party Liability Bodily Injury - Closed Claims Study

\$7,500 Deductible Savings Summary

(1)	(2)	(3)	(4)	(5)	(6)	(7) SUM((3):(6))	(8)	(9) 7 +8
Category	Claim Count	Non Pecuniary Net of \$2,500 Deductible	Special Damages	General Damages excluding Non- Pecuniary	All Other	Total Net Indemnity	Allocated Loss Adjustment Expenses	Total Indemnity and ALAE
All Claimants (net of \$2,500 Deductible)								
Reported Paid Amounts	1,741	43,886,852	8,517,658	13,416,551	3,087,368	68,908,429	3,877,645	72,786,074
Average Payment Post \$2,500 Deductible		25,208	4,892	7,706	1,773	39,580	2,227	41,807
Total Paid Trended to 07/01/17 Settlement Date	1,741	56,195,585	11,585,971	18,386,692	4,205,607	90,373,856	5,617,519	95,991,375
Average Payment Post \$2,500 Deductible		32,278	6,655	10,561	2,416	51,909	3,227	55,136
All Claimants (net of \$7,500 Deductible)								
Total Paid Trended to 07/01/17 Settlement Date	1,741	47,952,155	11,585,971	18,386,692	4,205,607	82,130,426	5,617,519	87,747,945
Average Payment Post \$7,500 Deductible		27,543	6,655	10,561	2,416	47,174	3,227	50,401
Total Projected Savings		8,243,431	0	0	0	8,243,431	0	8,243,431
Total Percent Savings		14.7%	0.0%	0.0%	0.0%	9.1%	0.0%	8.6%
Average Savings per Claimant		4,735	0	0	0	4,735	0	4,735

Note

Special Damages includes past loss of employment income, past loss of other income, past medical / rehabilitation / care, past replacement services, and funeral expenses
 General Damages excluding Non-Pecuniary includes future loss of employment income, future medical / rehabilitation / care, and future replacement services
 All Other includes punitive damages, prejudgment interest, post-judgment interest, party and party costs, and auto no-fault (Section B) offset
 ALAE includes legal fees (internal/external), independent (external) adjuster fees, and expert fees (including medical)

Newfoundland and Labrador
Private Passenger Auto
Third Party Liability Bodily Injury - Closed Claims Study

\$10,000 Deductible Savings Summary

(1) Category	(2) Claim Count	(3) Non Pecuniary Net of \$2,500 Deductible	(4) Special Damages	(5) General Damages excluding Non- Pecuniary	(6) All Other	(7) SUM((3):(6)) Total Net Indemnity	(8) Allocated Loss Adjustment Expenses	(9) 7 +8 Total Indemnity and ALAE
All Claimants (net of \$2,500 Deductible)								
Reported Paid Amounts	1,741	43,886,852	8,517,658	13,416,551	3,087,368	68,908,429	3,877,645	72,786,074
Average Payment Post \$2,500 Deductible		25,208	4,892	7,706	1,773	39,580	2,227	41,807
Total Paid Trended to 07/01/17 Settlement Date	1,741	56,195,585	11,585,971	18,386,692	4,205,607	90,373,856	5,617,519	95,991,375
Average Payment Post \$2,500 Deductible		32,278	6,655	10,561	2,416	51,909	3,227	55,136
All Claimants (net of \$10,000 Deductible)								
Total Paid Trended to 07/01/17 Settlement Date	1,741	44,150,428	11,585,971	18,386,692	4,205,607	78,328,699	5,617,519	83,946,218
Average Payment Post \$10,000 Deductible		25,359	6,655	10,561	2,416	44,991	3,227	48,217
Total Projected Savings		12,045,158	0	0	0	12,045,158	0	12,045,158
Total Percent Savings		21.4%	0.0%	0.0%	0.0%	13.3%	0.0%	12.5%
Average Savings per Claimant		6,919	0	0	0	6,919	0	6,919

Note

Special Damages includes past loss of employment income, past loss of other income, past medical / rehabilitation / care, past replacement services, and funeral expenses
 General Damages excluding Non-Pecuniary includes future loss of employment income, future medical / rehabilitation / care, and future replacement services
 All Other includes punitive damages, prejudgment interest, post-judgment interest, party and party costs, and auto no-fault (Section B) offset
 ALAE includes legal fees (internal/external), independent (external) adjuster fees, and expert fees (including medical)



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