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Section 2. Actuarial Justification

This report provides actuarial support for the indicated rate level changes for Newfoundland & Labrador Public Vehicles – Taxi & Limousines ("TX") individually rated and fleet rated as a part of the Facility Association ("FA") regulatory submission to Newfoundland & Labrador ("NL") Board of Commissioners of Public Utilities ("PUB"). The proposed effective dates of the rate changes are 100 days post approval for both new business and renewals. However, for the purposes of establishing average loss dates under the proposed rates, the indications were developed assuming an effective date of October 1, 2017 for both new business and renewals. The previous rate change for Taxis was submitted on March 16, 2016, with associated approved rates changes effective March 1, 2017 both new business and renewals.

This report estimates the provincial rate levels needs by coverage. The actuarial indications are derived in accordance with accepted actuarial practice in Canada. The underlying methodologies and assumptions are the responsibility of the signing actuary identified in Section 2.a.2.

This report is prepared in accordance with the instructions set out in Newfoundland & Labrador PUB Filing Guidelines (Category 2) effective September 1, 2011. This Section consists of two parts:

- text description; and
- data and technical analysis (i.e. supporting exhibits and appendices).

The text follows the format specified in PUB Rate Filing Requirements. The supporting exhibits and appendices immediately following the text are referenced throughout the text description section. To further assist the user of this filing, we have also included a detailed table of contents, at the beginning of Section 2, for the supporting exhibits and appendices. As Facility Association is proposing a change in the overall rate level, we have completed Section 2.a through Section 2.1 in accordance with PUB Rate Filing Requirements.

Section 2.a. Overall Description of Ratemaking Methodology and Summary

Section 2.a.1. Actuary's Report

I, Liqing Yang, a Fellow of the Canadian Institute of Actuaries, have been authorized to prepare a rate filing on behalf of Facility Association, CERTIFY THAT:

- This rate filing is in respect of the Public Vehicles Taxis and Limousines insurance category in the province of Newfoundland & Labrador, assumed to be effective October 1, 2017 for new and renewal business.
- 2. I have reviewed the data underlying this rate filing for reasonableness and consistency, and I believe the data is reliable and sufficient for the determination of the indicated rate changes.
- 3. The indicated rate changes have been calculated in accordance with Accepted Actuarial Practice in Canada.

In my opinion, the risk classification system is just and reasonable, reasonably predictive of risk and distinguishes fairly among rates.

Liqing Yang

Fellow, Canadian Institute of Actuaries

December 23, 2016 - Toronto

Date, Location

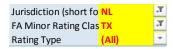


Section 2.a.2. Data and Methodologies

An on-level loss ratio model (described in more detail later in Section 2.a.2.2) is used to estimate changes in average rate levels needed to generate the targeted return for each of the following coverages¹:

- Third Party Liability (TPL)
- Accident Benefits (AccBen)
- Uninsured Automobile (UA)
- Collision (CL)
- Comprehensive (CM)
- Specified Perils (SP)

Facility Association no longer offers All Perils (AP) as a stand-alone coverage (policyholders may purchase collision and comprehensive coverages separately at the same deductible, thereby providing the coverage previously offered as AP). The table below summarizes annualized counts of taxis purchasing AP in relation to TPL and other physical damage coverages.



В	∃ Written Exposure (excl trailers)							
Accident Year 🚾	TPL	CL	CM	SP	AP			
2011	803	40	70	236	1			
2012	819	51	91	228	3			
2013	863	46	110	226	13			
2014	780	55	120	222	10			
2015	782	70	121	217	2			
Grand Total	4,045	261	512	1,129	28			

coverage penetration (i.e. count as % TPL count)

Accident Year	CL	CM	SP	AP	CL + AP	CM + SP + AP
2011	5.0%	8.8%	29.4%	0.1%	5.1%	38.3%
2012	6.2%	11.1%	27.8%	0.4%	6.6%	39.3%
2013	5.4%	12.8%	26.2%	1.5%	6.9%	40.5%
2014	7.0%	15.4%	28.4%	1.3%	8.3%	45.1%
2015	9.0%	15.5%	27.8%	0.2%	9.2%	43.5%

For consistency, AP is still referenced in exhibits, but its impact on the actual indications is nil.

Unless specified otherwise, all references to "coverage" in this report may also refer to any applicable "subcoverage(s)".

The proposed rate changes are not based on all assumptions recommended by Facility Association actuarial staff. Rather, management's proposed rate changes are derived from indications based on alternate assumptions that are aligned with PUB filing requirements, specifically:

. Cost of capital (0% cost of capital vs Facility Association target 12% return on equity)

¹ Facility Association doesn't offer Underinsured Motorist coverage (i.e. endorsement 44) for the Public Vehicle classes and as such, an indication for UM coverage is not included in this filing.



ii. Net return on investment (net return of 2.8% vs. Facility Association actuarial assumption of 0.47%)

Management's decision to base its rate change proposal on these alternate assumptions reflects their desire to expedite the rate approval process, rather than an alignment or view that these alternate assumptions are appropriate.

Section 2.a.2.1. The Data

The primary data sources underlying this analysis are all prepared by the Insurance Bureau of Canada (IBC) as follows:

- 1. FA Valuation quarterly development ("val") data compiled as at June 30, 2016;
- 2. FA Automobile Insurance Experience ("AIX")² Calendar/Accident Year exhibits compiled as at December 31, 2015; and
- 3. Industry AIX Calendar/Accident Year exhibits compiled as at December 31, 2015.

Data sourced from IBC is used without modification, except as may be specifically noted in this report. In this regard, reliance has been placed on the various data edit checks performed by IBC, which are designed to promote data integrity. IBC assembles the AIX data, on behalf of GISA, from the submissions made under the Automobile Statistical Plan by Facility Association Servicing Carriers and, for Industry exhibits, each of the insurers underwriting automobile insurance in the province. Because there are many companies providing this information and due to remoteness from the individual data elements, it is not practical to directly put in place audit or audit-like procedures. Therefore, reliance on this IBC/GISA data is without the benefit of any independent audit. The data is examined for reasonableness and any data extracted from computer-readable sources was reconciled to within acceptable tolerances to the published reports.

We believe the data used is reliable and sufficient for this rate analysis.

Facility Association's recorded claims amounts do not include allocated loss adjustment expenses and all references to "loss", "losses" or "claims amounts" should be considered to be referring to indemnity amounts only, unless stated otherwise. Industry data exhibits as produced by IBC on behalf of GISA usually include both loss and loss adjustment expenses. For consistency, where industry claims data is used, it is also on an "indemnity only" basis, unless otherwise noted.

Section 2.a.2.2. The Method

An on-level loss ratio method was used to estimate changes in average rate levels needed to generate the targeted return, with this estimated change referred to as the "indication". In general, this process involves a number of steps (at the coverage level):

- 1. estimating the current on-level average premium;
- 2. estimating a projected nominal indemnity loss ratio under our current rates:

² AIX data is prepared by IBC on behalf of the General Insurance Statistical Agency (GISA). *GISA is the statistical agent of nine participating insurance regulatory authorities across Canada. GISA gathers data via the Automobile Statistical Plan process, and has outsourced the data gathering and reporting function to the Insurance Bureau of Canada ("IBC") as its statistical service provider. IBC is also Facility Association's IT services provider.*



- where we have submitted a rate filing within the last two-to-three calendar years, this estimate
 adjusts the credibility-weighted projected nominal indemnity loss ratio from that filing for rate
 changes approved since that filing, claims trend between the average accident date used in that filing
 and the average accident date for this analysis, and premium trends between the average written
 effective date used in that filing and the average written effective date for this analysis, or
- where we have not submitted a rate filing within the last two-to-three calendar years, we assume
 that the rates currently in effect generate a return consistent with a 0.0% cost of capital (the return
 assumption currently allowed for Facility Association rates in Newfoundland & Labrador) for the
 policy period ending at the effective date of the rates proposed in this analysis and project a loss
 ratio consistent with this position to the future average claim and policy effective date using current
 claim and premium trends;
- estimating a projected nominal indemnity loss ratio based on Facility Association's experience only;
- 4. estimating the level of credibility that can be assigned to Facility Association's experience;
- 5. determining a credibility-weighted projected nominal indemnity loss ratio from 2, 3, and 4 above;
- estimating an investment yield rate based on Government of Canada bonds (as per Bank of Canada data)
 with considerations of investment expense and indemnity payout pattern to estimate net investment
 yield for calculating claim discount factor for each coverage;

However, at management's request, an alternate net investment yield (or "return on investment" or "ROI") assumption of 2.8% was used in support of management's proposed rate changes (based on a 0% cost of capital ("CoC") assumption). This request was made in light of the PUB filing guidelines (page A-8) indicated range of investment yields acceptable to the PUB.

However, under the current market conditions, it is not possible to construct a portfolio of terms of Government of Canada bonds (which we consider as our benchmark "risk-free" or more accurately as "free-of-default-risk") that match the cash flows we have projected that would generate a return this high. By implication, the only way to achieve this yield would be to use a portfolio of bonds that are not risk-free (with respect to default and/or liquidity in particular).

Generally, securities that are not risk-free require supporting capital (this is discussed in detail in Section 2.g.3). This additional capital need is not included in the alternate assumption indication, resulting in an inconsistency in the assumption set. This has been brought to management's attention and was accepted in relation to the interpretation of the filing guidelines.

- estimating the impact of the "time value of money" on the projected nominal indemnity loss ratio by application of discount factors (based on projected indemnity payment patterns and the selected investment yield) to the loss ratios to arrive at projected discounted indemnity loss ratios;
- 8. estimating the costs associated with allowed claims adjustment expenses ("excess legal") in excess of amounts paid to Servicing Carriers as claims fees;
- 9. determining the capital³ level required to support policies written in the projected policy period and the target return on that capital ("target after-tax Return on Equity");

 $^{^3}$ The terms "capital", "equity" and "surplus" are considered equivalent and therefore interchangeable within this report.



- 10. estimating the costs associated with all expenses (fixed expenses, commissions, "variable" expenses, income taxes);
- 11. estimating the impact of the "time value of money" on the projected revenue collection and expense payment by application of discount factors (based on projected cash flow patterns and the selected investment yield) to premium and expense costs; and
- 12. estimating the rate level change needed to support the target after-tax Return on Equity ("ROE") based on the above.

In estimating the cost of capital in the above process, the following are taken into account:

- a) the anticipated investment return on invested assets;
- b) the target after-tax Return On Equity; and
- c) the expected effective income tax rate.

The Facility Association's Board of Directors has set a target post-tax ROE of 12% in general for Facility Association Residual Market ("FARM") rates and Facility Association's rate indication is based on this target as well as Facility Association's assumptions for the loss trends and investment returns. However, at management's request, an "alternate" indication, used as the basis for the proposed rate change was estimated using 0% CoC and 2.8% net RoI, based on management's assessment of published filing requirements. The proposed base rates are then derived to reflect these proposed changes in average rate level. A summary of the indicated and proposed average rate level changes by coverage is shown in Indication Exhibit A-1.

For the purposes of our review of rate need for NL Taxi, based on Facility Association's assumptions including a net investment yield of 0.47% and the Facility Association Board target after-tax ROE of 12.0%, the overall indicated rate level change is 56.6%. However, using the alternate assumptions (including 0% of CoC and 2.8% net RoI), the overall rate indication drops to 29.7%. Facility Association's proposed rate level changes with overall increase of 29.7% are derived based on the alternate assumptions.

The proposed rate change selected by Facility Association management (and approved by the Facility Association's Board of Directors) reflects Facility Association management's interpretation of regulatory requirements. The proposed base rates are then derived to reflect these proposed changes in average rate level by coverage. A summary of the indicated and proposed average rate level changes by coverage is shown in Exhibit A. The detailed determination of coverage level indications is presented in Indication Exhibit C-1.

Section 2.a.2.3. Changes to the process since the last rate filing (March 2016)

There have been no changes to the overall process since the March 2016 filing.

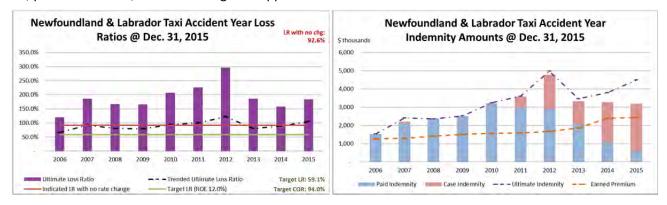
Section 2.a.2.4. Facility Association Experience Nominal Projected (Indemnity) Loss Ratio

In its monthly reporting, Facility Association provides results on the basis of two business segments, being "private passenger" and "non-private passenger", and the FA Taxi experience is included in the latter, along with all other non-private passenger classes (as the business segment's name suggests).

For the purposes of the rate analysis, the Facility Association Taxi most recent five accident years (indemnity only) experience's loss ratios by coverage are developed to ultimate using development factors derived from the June 30, 2016 valuation and brought on-level to the projected average accident date. The on-level exercise



involves adjusting historical indemnity loss cost levels and average premium levels for the estimated impacts of trends, product reforms, and rate changes as applicable.

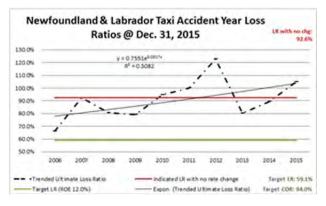


The preceding left chart provides the ultimate indemnity amount to earned premium ratio by accident year as currently estimated. The right chart provides a view in amounts, rather than ratios, to get a sense of volume through time.

In particular, the "dashed" black line in the left chart represents the "on-level" loss ratios for the policy term under consideration. That is, premium has been adjusted to account for all approved rate changes and for premium "trends" to the average effective date of the projected policy term and claims have been trended to the average accident date underlying the projected policy term. In contrast, the solid green line is the target loss ratio. It is clear from this chart that none of the 10 accident years present in this chart would be expected to generate a loss ratio at or below the target level in the projected policy period at rates currently charged.

Hence, it is not surprising to us that the current indication to generate the 12% target after-tax ROE is **56.6%**. It is important, however, to keep in mind that this is based on a credibility-weighted projected loss ratio. If instead the indication were based on giving equal weight strictly to each of the 10 accident years shown, **the indication decreases to 54.1%**; if the indication were based on giving equal weight strictly to each of the most recent 5 accident years, **the indication increases to 68.4%**.

Over time, if the claims experience continues as it has, the "credibility-weighting" process will eventually close the gap between the "loss ratio assumed underlying the current rates" and those underlying the experience. That is, if the claims experience continues as it has, it will be possible to show retrospectively that rates needed to increase in the range of 54.1% to 68.4%, for the October 1, 2016 to September 30, 2017 rating period, in order to generate a 12% ROE.



This assumes that the process of projecting "on-level" loss ratios has been accurate (i.e. that the process of trending claims and premiums does result in on-level loss ratios), the expectation is that no trend would be present that is statistically significant, if one were to fit an exponential trend line to the on-level loss ratios (as done in the chart to the left). That is not the case with the 10-year on-level loss ratios – the fitted trend is 3.2% (+/-1.7%) (statistically significant at the 10% level – the p-value is 9.6%) and the regression has adjusted R^2 value of 22% (we show the R^2 value at 31% in the chart to the left). This suggests that



there is an underlying "trend" in the FA taxi experience that is not being accounted for through the on-leveling process. This is also reflected in the variation of the on-level loss ratios for the first five years (average ratio of 82.7% with a standard deviation of 11.5%) and the latest five years (average ratio of 99.5% with a standard deviation of 16.2%). As the averages are more than a standard deviation apart, it would seem to suggest a difference in the experience that is not currently reflected in the FA "on-leveling" process. If this is the case and it continues, it suggests that indications each year will continue to increase at a level in excess of the net trend rate.

Section 2.b. Losses

The "losses" in this analysis (as in the previous analysis) are on an indemnity only basis (that is, all loss adjustment expenses are excluded from both the industry and Facility Association experience), but loss adjustment expense provisions are included in the rate level indication. We do not consider there to be Allocated Loss Adjustment Expenses (ALAE) as applicable to Facility Association, due to the nature of how Servicing Carriers are compensated for providing claims adjudication and management services. All such costs are considered Unallocated Loss Adjustment Expenses as described in Section 2.d Unallocated Loss Adjustment Expenses ("ULAE").

We rely on data provided by IBC/GISA for Facility Association experience by rating class. The GISA/IBC AIX⁴ reports contain direct loss data (i.e. prior to any reinsurance transactions). Unless specifically noted otherwise in a particular context, the experience used for each coverage or sub-coverage encompasses all underlying categories of classification (e.g. limit, deductible) as reflected in the AIX. For Accident Benefits, we did not analyze losses at the sub-coverage level as defined by the Automobile Statistical Plan, as this additional detail was not deemed warranted. (Please see Section 2.a.2.1 for a list of sources of data used.)

For purposes of estimating ultimate claim amount and counts, we leverage the results of valuations as described in the next sections. Facility Association has outsourced its IT services and support to IBC, and valuation data is summarized by IBC based on FARM data reported by Servicing Carriers. This data is not at the rating class level, but rather at a "business segment" level and valuations are completed on a "private passenger" vs. "non-private passenger" basis to reflect how results are shared with the membership.

Detailed information on experience period losses is provided in Indication Exhibit D-1.

Section 2.b.1. Indemnity Amount Development

The Facility Association Residual Market ("FARM") non-private passenger business segment⁵ valuation by coverage as at June 30, 2016 was used as the basis to estimate indemnity amounts at ultimate, where the underlying data used for FA's valuation includes both individually rated and fleet rated vehicles. Loss Development Factors ("LDFs") are calculated as the ratio of the valuation selected ultimate indemnity amount to recorded indemnity amounts (as at June 30, 2016) for each accident year. (Please see Indication Exhibit D-2 for the selected LDF calculation).

⁴ IBC collects data on behalf of the General Insurance Statistical Agency (GISA) under the Automobile Statistical Plan 9 and prepares summary data for use as "AIX" datasets.

⁵ Quarterly valuations are completed in relation to FARM results by jurisdiction and business segment (being private passenger and non-private passenger). Specifically, public vehicle specific results for the FARM are not valued separately. For the purposes of this rate analysis, non-private passenger valuation results are deemed to be a reasonable proxy for development for public vehicles on the assumption that claims reporting patterns will be similar.



This approach allows for recognition that the valuation process considers alternative methods and assumptions in establishing the final selected ultimate level for indemnity amounts – specifically, while the link ratio method is one of the methods used in the valuation process, it is not the only method. Consideration is given to estimates of ultimate based on various methodologies, with final selected valuation ultimate taking into consideration the strengths and weaknesses of the various methodologies and associated estimates. Appendix A (Part 1) (following the text part of Section 2) contains the loss development analyses for **non-private passenger business segment** based on Facility Association experience as at June 30, 2016.

Section 2.b.2. Claim Count Development

The FARM non-private passenger business segment⁵ valuation by coverage as at June 30, 2016 was used as the basis to estimate claim counts at ultimate, where the underlying data used for FA's valuation includes both individually rated and fleet rated vehicles. Claim Count Development Factors ("CDFs") are calculated as the ratio of the valuation selected ultimate claim counts to recorded claim counts (as at June 30, 2016) for each accident year. (Please see Indication Exhibit E-2 for the selected CDF calculation.)

This approach allows for recognition that the valuation process considers alternate methods and assumptions in establishing the final selected ultimate level for claim counts – specifically, while the link ratio method is one of the methods used in the valuation process, it is not the only method. Consideration is given to estimates of ultimate based on various methodologies, with final selected valuation ultimate taking into consideration the strengths and weaknesses of the various methodologies and associated estimates. Appendix A (Part 2) (following the text part of Section 2) contains the claim count development analyses for **non-private passenger business segment** based on Facility Association experience as at June 30, 2016.

Section 2.b.3. Loss Trend

Appendix B contains the loss development, claim count development, and trend analyses for Commercial Vehicles based on Industry experience as at December 31, 2015⁶, where the underlying data used for FA's valuation includes both individually rated and fleet rated vehicles. The trend analysis determines our "best-fit" estimate of historical claims frequency and severity ("trend structure"), and will include the impact of legislative / regulatory / "product reform" changes to the extent reflected in the actual and modeled (fitted) data, or imposed on the model through specific coefficient selection (if applicable).

Trend Period

The effective date assumed in determining the rate indications is October 1, 2017 for both new business and renewals, and we assume that the rates are to be in effect for a 12-month period (the "projection period"). Losses are trended from the average accident date of each accident period in the experience period to the average accident date of the projection period (September 30, 2018 as derived below).

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⁶ A separate trend analysis for public vehicle experience is not currently undertaken. It is assumed that commercial vehicle trends are a reasonable proxy for public vehicle trends.



	new business	renewals	average	
% spli	14.1%	85.9%	[5]	FA download facility (weighted avg 2011-201 pol yrs)
rate program effective dates	01-Oct-2017	01-Oct-2017	01-Oct-2017 [6]	assumption, with average based on [5]
# mths future rates in effect	12.0		30-Sep-2018 [7]	=> generates last effective date for rate program
average wr	tten date in eff	ective period:	01-Apr-2018 [8]	= average of [6] & [7]
. Proposed Rate Program Policy Terms				
policy term mths	6	12	total	
% split	1.0%	99.0%	[9]	FA download facility
first possible accident date	01-Oct-2017	01-Oct-2017	[10]	=[6]
last possible accident date	30-Mar-2019	30-Sep-2019	[11]	=[7]+policy term in mths
average accident date	01-Jul-2018	01-Oct-2018	30-Sep-2018 [12]	= total average based on [9]

Trend Analysis

The trend analysis utilizes Industry data to take advantage of the greater inherent stability of the larger body of data. It is assumed that the factors that affect industry loss costs similarly affect the Facility Association. Industry data is made available semi-annually for private passenger, commercial, and motorcycle separately. We believe it is reasonable to assume taxi experience will experience similar trends as commercial. We summarize this analysis in Indication Exhibit D-5 and supporting data is included in Appendix B.

Appendix B contains our trend analysis based on Industry NL Commercial Vehicle experience as at December 31, 2015. We conducted the trend analysis by sub-coverage. We did not incorporate a credibility procedure in the trend analysis due to the nature of the approach taken. We included accident periods from 1996-H1 to 2015-H2 as our actual results. Consideration was given within the analysis to exclude certain data points (deemed potential influential "outliers" or, where actual frequency and/or severity was zero, as zero data points are not able to be fitted using the exponential regression method we use), where deemed appropriate.

Our trend analysis was completed on an indemnity-only basis, as this best reflects the Servicing Carrier compensation model with respect to claims services. In contrast, the PUB published benchmark trends are based on indemnity plus expenses. We believe that it is reasonable to suspect trend models selected on indemnity plus expenses could be significantly different than indemnity alone. For instance, over time, insurers may change the level of outsourced claims adjudication; claimant use of legal counsel may change over time, resulting in more or less external resources required by an insurer to adjudicate claims; times of product reform may require additional external expertise and resources during "learning phases" as insurers (and claimants) learn to work within the system; as well, during product reforms, there may be more rigorous litigation early on until such time as appropriate precedents are established. This is discussed along with a general discussion of differences in methodologies in Appendix E (a reproduction of Facility Association's response to the Oliver Wyman Draft Benchmark Trend Analysis of Newfoundland & Labrador Industry Commercial Vehicles as at December 31, 2015).

Although our exhibits include loss cost, our trend analyses were performed on frequency and severity separately, with the resulting model results combined to generate loss cost trend structure models.

Our "trend analysis" approach is really a process of modeling the latest 40 accident half years of experience using regression, from which we project into the immediate future for the purposes of putting claims experience onlevel. This approach is not confined to "trend", but rather takes into consideration any changes that we can



identify that explain the historical results, or which will help explain future results (where product changes are expected to occur in the future). Using all of the available experience reduces the impact of small sample sizes, and generally improves parameter estimation and estimation stability over time. Using all 40 data points available also allows for a more direct comparison of competing model fit metrics, as well as forcing the analyst to make explicit their view on where results "change" (either scalar or slope) and if any data point is to be excluded, but be explicit about this as well.

Having fitted values for each experience period as well as for each future period allows us to use the ratio of these values to adjust actual historical experience to "on-level" directly, without having to apply multiple "trend factors" or "reform factors" etc.

Our process starts with the model structure selected with our previous analysis – this is analyzed with respect to updated valuation results and the replacement of the older period(s) that have been dropped off with the more recent periods (for example, the December 2015 data had 1995-H2 drop off and 2015-H2 added). Our second standard model structure for review is a "reform period" structure – that is, we look at a model constructed to reflect various "reform" periods that apply to the jurisdiction (we do this for each coverage – even if it is not necessarily clear that a reform would impact the coverage – the statistics will tell us what the data says). After these two primary models, we will use residual analysis to determine other various models to consider, if any. Model selection compares various fit statistics etc. from competing models, and may also take into consideration other factors. For example, we prefer simpler models to complex models; if period changes are "close to" reform periods, we prefer to follow reform periods; we generally prefer to have frequency and severity period selections aligned, etc. Seasonality is a parameter we consider through our modeling process. Proposed model selections are discussed with the Appointed Actuary and Facility Association Actuarial Committee prior to final selection.

It is also important to note that we do not "keep" every model structure that is analyzed – part of the analysis is to test for statistical significance (and we use a 5% significance as our general cutoff) – if a preliminary model structure has a parameter that is not statistically significant, we eliminate that parameter – that is, we generally only keep models where the parameters are statistically significant.

We model the experience using different time periods where statistical tests/review of results support such (e.g. periods aligned with product reforms as previously discussed). When split this way, scalar coefficients (i.e. one-time impacts that "shift" lines up or down) and trend coefficients (i.e. slope of the line) would reflect our view of "best fits" of changes between periods. We always considered using a single "all periods" set, as well as a default set aligned with product reform as previously indicated. From there, other periods were considered as deemed appropriate from our review of the results (mainly through residual analysis as indicated above).

In common vernacular, "past" trends reflect selected models of the data up to the last period available (in this case, December 31, 2015), whereas "future" trends reflect selected model projections beyond the last period available. Given our approach to allowing regressions on various periods, a clear-cut definition of "past trend" (generally referring to the slope coefficient) is not necessarily readily available. In an attempt to simplify the discussion, where there are two or more periods included in our final selected model applicable to the most recent ten (10) accident periods (i.e. most recent five accident years), we consider the "past trend" as the slope associated with the second-most-recent period up to the valuation date. Where this is the case, we consider the "future trend" to begin at the start of the most recent period selected. Otherwise, we maintain the "standard" definitions of when the past ends and the future starts.

For each sub-coverage in Appendix B (Part 1), we present three charts comparing actual frequency, severity and loss cost values to the fitted values. We used "adjusted R²", which takes into account the number of parameters used by a particular model, in addition to the fit measure, to reduce the likelihood of "over-fitting" the model



with parameters with little predictive power. Where all periods are included in models, those model fits can be directly compared (i.e. it is appropriate to compare adjusted R² fits of models where the models have used the same data points). Otherwise, caution needs to be taken in comparing model fits.

We also include the "design matrix" for the models in the exhibits for Appendix B. An example design matrix is shown below.

Chart Periods Exclude Data Point Season All Years Scala	Trend	Periods based	on average a	ccident date	where scalar p	present			Fre	equency Valu	es		
Chart Data Point Season All Years Scala				Trend Periods based on average accident date where scalar present									
Chart Data Point Season All Years Scala								Outcome		Fitted		Selected	
Periods	1 Trend 1	Scalar 2	Trend 2	Scalar 3	Trend 3	Scalar 4	Trend 4	(ultimate	Fitted	Model	Selected	Model	
177.								from	Model	Residual	Model	Residual	
								valuation)				nesidadi	
0 1 1	1	1	1	1	1	1	1		include varia				
'96H1 0 1996.25	-	-	-	-	-	-	-	4.2929	5.6079	(1.3150)	5.6079	(1.3150)	
'96H2 1 1996.75		-	-	-	-	-	-	5.0785	5.8164	(0.7379)	5.8164	(0.7379)	
'97H1 0 1997.25	-	-	-		-	-		7.9804	6.0326	1.9478	6.0326	1.9478	
'97H2 1 1997.75		-				-	-	7.5518	6.2569	1.2949	6.2569	1.2949	
'98H1 0 1998.25	-	-	-		-			6.6487	6.4895	0.1592	6.4895	0.1592	
'98H2 1 1998.75 '99H1 0 1999.25		-	-		-	-		6.3764	6.7308	(0.3544)	6.7308 6.9810	(0.3544)	
99H1 0 1999.25 199H2 1 1999.75		-	-					6.4756 6.4357	6.9810 7.2406	(0.5054)	7.2406	(0.8049)	
		-			-						7.5098		
'00H1 0 2000.25 '00H2 1 2000.75		-	-					6.7309 9.7971	7.5098 7.7890	(0.7789) 2.0081	7.7890	(0.7789) 2.0081	
'01H1 0 2001.25					-			11.7625	8.0785	3.6840	8.0785	3.6840	
'01H2 1 2001.25	-	-	-		-			7.1216	8.3789	(1.2573)	8.3789	(1.2573)	
'02H1 0 2002.25		-	-	-	-	-		8.9091	8.6904	0.2187	8.6904	0.2187	
'02H2 1 2002.25								8.1611	9.0134	(0.8523)	9.0134	(0.8523)	
'03H1 0 2003.25				-	-			11.3335	9.3485	1.9850	9.3485	1.9850	
'03H2 1 2003.23								7.2318	9.6961	(2.4643)	9.6961	(2.4643)	
	.00 2004.25			-				7.2623	6.6275	0.6348	6.6275	0.6348	
	.00 2004.23							6.5107	6.5406	(0.0299)	6.5406	(0.0299)	
	.00 2005.25							5.9904	6.4549	(0.4645)	6.4549	(0.4645)	
	.00 2005.75							6.6266	6.3703	0.2563	6.3703	0.2563	
	00 2006.25							5.9897	6.2868	(0.2971)	6.2868	(0.2971)	
	.00 2006.75							5.5685	6.2044	(0.6359)	6.2044	(0.6359)	
	00 2007.25							5.6510	6.1231	(0.4721)	6.1231	(0.4721)	
	00 2007.75							6.7651	6.0428	0.7223	6.0428	0.7223	
	.00 2008.25							6.4766	5.9636	0.5130	5.9636	0.5130	
	.00 2008.75		-					5.7195	5.8854	(0.1659)	5.8854	(0.1659)	
	.00 2009.25			-				5.8593	5.8083	0.0510	5.8083	0.0510	
	.00 2009.75	-						6.6205	5.7322	0.8883	5.7322	0.8883	
	.00 2010.25						-	4.9451	5.6570	(0.7119)	5.6570	(0.7119)	
'10H2 1 2010.75		1.00	2010.75					5.5424	5.9125	(0.3701)	5.9125	(0.3701)	
'11H1 0 2011.25		1.00	2011.25	-	-	-	-	5.8664	5.6377	0.2287	5.6377	0.2287	
'11H2 1 2011.75		1.00	2011.75					6.0273	5.3757	0.6516	5.3757	0.6516	
'12H1 0 2012.25		1.00	2012.25	-	-	-	-	4.6868	5.1258	(0.4390)	5.1258	(0.4390)	
'12H2 1 2012.75		-		1.00	2012.75			5.9102	5.9102	0.0000	5.9102	0.0000	
'13H1 0 2013.25			-	1.00	2013.25	-	-	6.2055	6.2055	(0.0000)	6.2055	(0.0000)	
'13H2 1 2013.75		-				1.00	2013.75	5.6887	5.6748	0.0139	5.6748	0.0139	
'14H1 0 2014.25		-				1.00	2014.25	5.8551	5.5167	0.3384	5.5167	0.3384	
'14H2 1 2014.75		-				1.00	2014.75	4.8678	5.3630	(0.4952)	5.3630	(0.4952)	
'15H1 0 2015.25		-	-			1.00	2015.25	5.2420	5.2136	0.0284	5.2136	0.0284	
'15H2 1 2015.75		-				1.00	2015.75	5.2201	5.0684	0.1517	5.0684	0.1517	
'16H1 0 2016.25		-	-	-		1.00	2016.25		4.9272		4.9272		
'16H2 1 2016.75		-	-		-	1.00	2016.75		4.7899		4.7899		
'17H1 0 2017.25			-		-	1.00	2017.25		4.6565		4.6565		
'17H2 1 2017.75					-	1.00	2017.75		4.5268		4.5268		
'18H1 0 2018.25			-		-	1.00	2018.25		4.4007		4.4007		
'18H2 1 2018.75	-		-		-	1.00	2018.75		4.2781		4.2781		
'19H1 0 2019.25			-		-	1.00	2019.25		4.1589		4.1589		
'19H2 1 2019.75					-	1.00	2019.75		4.0430		4.0430		
'20H1 0 2020.25					-	1.00	2020.25		3.9304		3.9304		
'20H2 1 2020.75						1.00	2020.75		3.8209		3.8209		
'21H1 0 2021.25	-		-	-	-	1.00	2021.25		3.7144		3.7144		

The row immediately below the column title row is used to indicate whether that particular column's values were used as parameters in the model ("0" for no, "1" for yes). In the above case, "seasonality was not included, but an all year's trend and 4 other "additional" time periods were selected, having both a "scalar" parameter and a "trend" parameter. An exponential regression using the selected parameters against the "response" variable (in this case, our selected ultimates for frequency) is performed to estimate coefficients for each parameter. We would then consider removing any parameters where the associated coefficient was deemed to be not significantly significant. Fitted model residual cells and corresponding chart period cells that are highlighted in green shade indicate that the fitted value is more than 2 standard errors from the actual "response" value (i.e. a residual analysis check).

Individual data points may be excluded – these data exclusions would be indicated in the design matrix table above via a "y" placed under the column "Exclude Data Point (y)?". In the example above, there are no data exclusions.



Finally, actual data in the above ends at '15H2, but we project forward to '21H1, based on the model's parameters and associated coefficients. The selected model may have different parameter coefficients than the regression fitted model (for example, we may superimpose a scalar change or trend rate on the model).

The following table summarizes the selected annual past and future loss trend rates by coverage and sub-coverage:

	FA Loss Trend Model Summary - Current						
	Loss	Cost	Frequ	iency	Seve	erity	Past and Future Trend Cut-Off Date
Coverage or Subcoverage	Past	Future	Past	Future	Past	Future	
Third Party Liability							
TPL BI	3.5%	3.5%	0.0%	0.0%	3.5%	3.5%	Dec. 31, 2015
TPLPD	2.1%	2.1%	0.0%	0.0%	2.1%	2.1%	Dec. 31, 2015
Accident Benefits							
Accident Benefits (indivis)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Freq: Dec. 31, 2015/ Sev: Jun. 30, 2011
Uninsured Automobile	8.1%	8.1%	0.0%	0.0%	8.1%	8.1%	Jun. 30, 2015
Other Coverages							
Collision	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Dec. 31, 2015
Comprehensive	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Dec. 31, 2015
Specified Perils	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Dec. 31, 2015

The resulting trend structure model for TPL in total is derived directly from the trend structure models of each sub-coverage, by simply summing the modeled loss costs of each sub-coverage. The table below shows the total modeled loss cost for TPL (in the column titled "TPL (indivisible)"), along with the modeled loss cost for each sub-coverage.

Accident Year	Bodily Injury	Property Damage	DCPD	TPL (indivisible)
2006	457.81	159.13	-	616.94
2007	473.74	162.40	-	636.14
2008	490.20	165.74	-	655.94
2009	507.26	169.15	-	676.41
2010	524.89	172.64	-	697.53
2011	543.15	176.17	-	719.32
2012	562.04	179.79	-	741.83
2013	581.59	183.49	-	765.08
2014	601.81	187.25	-	789.06
2015	622.75	191.12	-	813.87
2016	644.40	195.03	-	839.43
2017	666.82	199.05	-	865.87
2018	690.01	203.14	-	893.15
2019	714.01	207.32	-	921.33
2020	738.84	211.58	-	950.42

The "past" trend period for TPL ends at 2015-H2, so the implied annualized past loss cost trend rate (3.1%) can be estimated as the ratio of any two adjacent accident loss costs for accident years 2015 and prior – for example, using 2013 over 2012 (765.08/741.83-1 = approximately 3.1%). Similarly, the implied annualized future loss cost trend (3.2%) can be estimated as the ratio of any two adjacent accident loss costs for accident years 2016 and later – for example, using 2018 over 2017 (893.15/865.87-1 = approximately 3.2%). In this case, the combined "trend" rate will be increasing over time, as BI has a higher trend rate (3.5%) than PD (2.1%) and so the combined TPL trend will rise over time toward the higher BI trend rate of 3.5%.

It is also instructive to compare how the "trend rate" selections have changed between those used in the March 2016 filing compared with the current updated selections, as the former were based on Industry data as at December 31, 2014 whereas this analysis is based on selections using Industry data as at December 31, 2015. We have also included a comparison of NL PUB loss cost trend rates at December 31, 2014 and December 31, 2015. Facility Association proposed rate changes are based on NL PUB loss cost trends at Dec. 31, 2015.

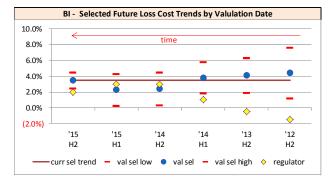


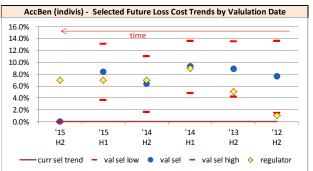
Coverage or Subcoverage	FA Selec	FA Selected Loss Cost Trend Rates			NL PUB Selected Loss Cost Trend Rates			NL PUB Selected less FA Selected		
	2014-H2	2015-H2	pt chg	2014-H2	2015-H2	pt chg	2014-H2	2015-H2	pt chg	
TPL BI	2.4%	3.5%	1.1%	3.0%	2.0%	(1.0%)	0.6%	(1.5%)	(2.1%)	
Std error:	2.1%	1.0%								
TPL PD	3.1%	2.1%	(1.0%)	3.0%	2.0%	(1.0%)	(0.1%)	(0.1%)	0.0%	
Std error:	2.1%	1.3%								
Accident Benefit	6.4%	0.0%	(6.4%)	7.0%	7.0%	0.0%	0.6%	7.0%	6.4%	
Std error:	4.7%	0.0%								
Uninsured Automobile	11.5%	8.1%	(3.4%)	7.0%	7.0%	0.0%	(4.5%)	(1.1%)	3.4%	
Std error:	4.6%	3.5%								
Collision	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Std error:	0.0%	0.0%								
Comprehensive	1.4%	0.0%	(1.4%)	1.5%	0.0%	(1.5%)	0.1%	0.0%	(0.1%)	
Std error:	3.1%	0.0%	•							
Specified Perils	0.0%	0.0%	0.0%	1.5%	0.0%	(1.5%)	1.5%	0.0%	(1.5%)	
Std error:	0.0%	0.0%								

We consider three things as being clear when we consider the preceding table:

- i. Facility Association's selected trend rates changes vary by coverage, with some increasing, some decreasing, and some remaining unchanged;
- ii. the PUB's selected trend rates have only decreased or remained unchanged;
- iii. the biggest differences between FA's selections and the PUB's are for BI (difference of 1.5 points, where FA is higher) and AccBen (difference of 6.4 points, where FA is lower)

The charts below track the selections of future loss cost trend rates over time (with time moving from right to left so that the most recent selections based on the 2015-H2 data is shown left most in the charts). For BI (chart on left), the FA selected future trend rates have been reasonably consistent, and the current estimate of 3.5% falls within a standard error of each of the previous selections, suggesting that the updated selection is not statistically different from prior selections. In contrast, the PUB selected future trend rate has moved considerably throughout the various valuations, and has been within a standard error of the FA selection only twice during the period captured. The current selection of 2.0% is statistically different from the FA selection, as it is outside of one standard error of our selection.

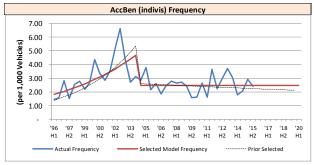


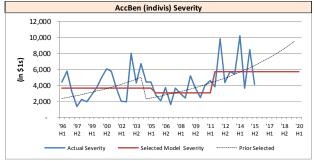


For AccBen, the FA selected future trends were historically consistent and were not statistically different from one another up until this latest analysis, where the selected future trend rate at 0.0% indicates FA no longer sees a relationship between loss cost and time for this coverage (as such, there is no "standard error" band as there is effectively no parameter). There were two drivers of this change. First, our updated selection for past/future frequency moved the trend from -1.3% to 0.0%. This reflected the impact of updated data, but also put the trend in line with the frequency trend for BI and CL (the coverage frequencies are correlated as one would expect, as

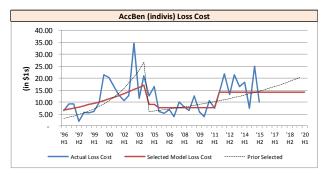


claims derive from accidents). Second, the severity trend structure selected differed from the previous selection to reflect what we believe now to be a structural change between 2005-H1 and 2005-H2 and between 2011-H1 and 2011-H2 (we have not attempted to determine a "cause" of this change), as opposed to our previous selection of 2 periods (with the change occurring between 2004-H1 and 2004-H2).





As a result, the loss cost trend structure reflects the updates above, so that the latest period is from 2011-H2 onward, and the loss cost past/future trend from this point is 0.0%.



Detailed discussion by coverage is presented in the sections that follow.

Third Party Liability - Bodily Injury (TPL BI)

For TPL BI frequency, we believe the best split to be two periods (1996-H1 to 2004-H1; 2004-H2 and beyond), with the "past trend" ending at 2015-H2 and "future trend" starting at 2016-H1. Seasonality was excluded as the p-value indicated it was not significant. There were no data exclusions. The adjusted R² of the regression analysis was **0.4845**, and as the fitted was taken as the selected model, the adjusted R² of the selected model was **0.4845**.

For TPL BI severity, we believe the best split to be two periods (1996-H1 to 2004-H1, 2004-H2 and beyond), with the "past trend" ending at 2015-H2 and "future trend" starting at 2016-H1. Seasonality was included as the p-value indicated it was significant. There were 3 data exclusions (all of the data exclusions related to the initial 1996-H1 to 2004-H1 period, where the exclusions were based on residual analysis). The adjusted R² of the regression analysis was **0.4235**, and as the fitted was taken as the selected model, the adjusted R² of the selected model was **0.4235**.

Third Party Liability – Property Damage (TPL PD)

For TPL PD frequency, we believe the best split to be two periods (1996-H1 to 2004-H1; 2004-H2 and beyond), with the "past trend" ending at 2015-H2 and "future trend" starting at 2016-H1. Seasonality was included as the p-value indicated it was significant. There was one data exclusion based on residual analysis. The adjusted R² of the regression analysis was **0.6789**, and as the fitted was taken as the selected model, the adjusted R² of the selected model was **0.6789**.



For TPL PD severity, we believe the best split to be two periods (1996-H1 to 2004-H1; 2004-H2 and beyond), with the "past trend" ending at 2015-H2 and "future trend" starting at 2016-H1. Seasonality was not included as the p-value indicated it was not significant. There was one data exclusion based on residual analysis. The adjusted R² of the regression analysis was **0.7333**, and as the fitted was taken as the selected model, the adjusted R² of the selected model was **0.7333**.

Accident Benefits (AccBen)

For AccBen frequency, we believe the best split to be two periods (1996-H1 to 2004-H1; 2004-H2 and beyond), with the "past trend" ending at 2015-H2 and "future trend" starting at 2016-H1. Seasonality was not included as p-value indicated it was not significant. There were no data exclusions. The adjusted R² of the regression analysis was **0.3395**, and as the fitted was taken as the selected model, the adjusted R² of the selected model was **0.3395**.

For AccBen severity, we believe the best split to be three periods (1996-H1 to 2005-H1, 2005-H2 to 2011-H1, 2011-H2 and beyond), with the "past trend" ending at 2015-H2 and "future trend" starting at 2016-H1. Seasonality was not included as the p-value indicated it was not significant. There were no data exclusions. The adjusted R^2 of the regression analysis was **0.1837**, and as the fitted was taken as the selected model, the adjusted R^2 of the selected model was **0.1837**.

Uninsured Automobile (UA)

For UA frequency, we believe the best split to be one period (1996-H1 and beyond), with the "past trend" ending at 2015-H2 and "future trend" starting at 2016-H1. Seasonality was not included as p-value indicated it was not significant. There was one data exclusion based on the residual analysis and 5 data exclusions due to "0" value data points to allow exponential curve fitting. Our model indicated that there was no relationship between frequency and time (i.e. the best fit of frequency is the average frequency over the period, and the "trend" is 0.0%). As such, R² values are not calculated.

For UA severity, we believe the best split to be one period (1996-H1 and beyond), with the "past trend" ending at 2015-H2 and "future trend" starting at 2016-H1. Seasonality was included as the p-value indicated it was significant. There were 4 data exclusions based on the residual analysis and 4 data exclusions due to "0" value data points to allow exponential curve fitting. The adjusted R² of the regression analysis was **0.2895**, and as the fitted was taken as the selected model, the adjusted R² of the selected model was **0.2895**.

Underinsured Motorist (UM)

While the trend analysis was carried out for UM, the discussion has been omitted here, since Facility Association does not offer UM for the Public Vehicle class.

Collision (CL)

For CL frequency, we believe the best split to be one period (1996-H1 and beyond), with the "past trend" ending 2015-H2 and "future trend" starting 2016-H1. Seasonality was not included as the p-value indicated it was not significant. There were no data exclusions. Our model indicated that there was no relationship between frequency and time (i.e. the best fit of frequency is the average frequency over the period, and the "trend" is 0.0%). As such R² values are not calculated.

For CL severity, we believe the best split to be one period (1996-H1 and beyond), with the "past trend" ending 2015-H2 and "future trend" starting 2016-H1. Seasonality was included as significant based on p-value. There was one data exclusion based on the residual analysis. The adjusted R^2 of the regression analysis was **0.0751**, and as the fitted was taken as the selected model, the adjusted R^2 of the selected model was **0.0751**.



Comprehensive (CM)

For CM frequency, we believe the best split to be two periods (1996-H1 to 2004-H1; 2004-H2 and beyond), with the "past trend" ending 2015-H2 and "future trend" starting 2016-H1. Seasonality was included as significant based on p-value. There were no data exclusions. The adjusted R^2 of the regression analysis was **0.7664**, and as the fitted was taken as the selected model, the adjusted R^2 of the selected model was **0.7664**.

For CM severity, we believe the best split to be two periods (1996-H1 to 2004-H1; 2004-H2 and beyond), with the "past trend" ending 2015-H2 and "future trend" starting 2016-H1. Seasonality was included as the p-value indicated it was significant. There were no data exclusions. The adjusted R² of the regression analysis was **0.7275**, and as the fitted was taken as the selected model, the adjusted R² of the selected model was **0.7275**.

Specified Perils (SP)

For SP frequency, we believe the best split to be one period (1996-H1 and beyond), with the "past trend" ending 2015-H2 and "future trend" starting 2016-H1. Seasonality was not included as the p-value indicated it was not significant. There were 2 data exclusions based on the residual and 6 data exclusions due to "0" value data points to allow exponential curve fitting. Our model indicated that there was no relationship between frequency and time (i.e. the best fit of frequency is the average frequency over the period, and the "trend" is 0.0%). As such, R² values are not calculated.

For SP severity, we believe the best split to be one time period (1996-H1 and beyond), with the "past trend" ending 2015-H2 and "future trend" starting 2016-H1. Seasonality was not included as the p-value indicated it was not significant. There were 8 data exclusions due to "0" value data points to allow exponential curve fitting. The adjusted R^2 of the regression analysis was **0.2569**, but rather than take the fitted trend (rate was 13.3%), we opted to select a trend of 0.0% (and model the severity "fit" over the period to be equal to the average); on this basis, R^2 values are not calculated.

All Perils (AP)

While the trend analysis was carried out for AP, the discussion has been omitted here as Facility Association no longer offers this as a stand-alone coverage.

Section 2.b.4. Treatment of Large Losses

As large loss information is not available, there is no specific procedure for estimating and accounting for the impact of large losses (as per the previous analyses).

Section 2.b.5. Catastrophe (or Excess Claim) Procedure

As catastrophe information is not available, there is no specific procedure for estimating and accounting for the impact of catastrophes on any coverages or sub-coverages (as per the previous analyses).

Section 2.b.6. Other Adjustments to Losses – HST Adjustment

HST was implemented on January 1, 2008 and Facility Association's Taxi indications are based on the experience of 2011 to 2015; as such, no specific additional HST adjustment is needed.



Section 2.c. Allocated Loss Adjustment Expenses ("ALAE")

We do not consider there to be ALAE as applicable to Facility Association, due to the nature of how Servicing Carriers are compensated for providing claims adjudication and management services. All such costs are considered "ULAE" as described in Section 2.d.Unallocated Loss Adjustment Expenses ("ULAE").

Section 2.d. Unallocated Loss Adjustment Expenses ("ULAE")

Facility Association has, in accordance with the Plan of Operation, a compensation arrangement with its Servicing Carriers in relation to their compensation for providing services related to managing, adjudicating, settling, and reporting claims on behalf of Facility Association, including managing any associated salvage, subrogation, and structured settlements. This arrangement consists of two components:

- a claims service fee, determined as a percentage of earned premium on a sliding scale basis driven off the indemnity loss ratio (see Section 2.d.1); and
- reimbursement for certain specific allowed claims adjustment expenses (see Section 2.d.2).

Section 2.d.1. **ULAE - Servicing Carrier's Claims Expenses**

The total **claims expenses** by accident year paid to Servicing Carriers consists of an initial fee (paid monthly as a percentage of earned premium) and a three subsequent "retroactive" adjustments (first after 1 year, after 3 years and finally after 5 years) to account for estimated claim activity variances from the "base line" estimate relative to premium.

For Newfoundland & Labrador, the initial claim fee of 10.0% of earned premium (associated with an indemnity loss ratio of 67.5%) is paid to Servicing Carriers. The retroactive claims fee is calculated by subtracting from the initial fee an estimated "final" fee calculated as:

- a base rate of 3.25%, PLUS
- the estimated 72-month recorded indemnity loss ratio divided by 10, SUBJECT TO
 - o a minimum ratio of 9.0% (associated with an indemnity loss ratio of 57.5% or lower); and
 - o a maximum ratio of 16.0% (associated with an indemnity loss ratio of 127.5% or higher).

As this fee is directly related to the indemnity loss ratio, any change in rates will affect its projected value. In determining the rate indication, the initial claims fee is set at 10.0% as per above, and a separate "retroactive claims fee adjustment" is determined iteratively to reflect the recorded indemnity loss ratio expected at 72 months based on indicated rate changes, where the appropriate premium in that ratio is based on the applicable projected rate level. A higher proposed rate level will result in higher premium which will result in a lower projected recorded indemnity loss ratio as at 72 months which will result in a lower claims fee as a ratio to premium; alternatively, a lower proposed rate level will result in lower premium which will result in a higher projected recorded indemnity loss ratio as at 72 months which will result in a higher claims fee as a ratio to premium. This iterative approach properly reflects the sliding scale nature of the claims fee arrangement as set out in the FA Plan of Operation. The recorded indemnity level at 72 months is estimated from an estimated ratio of IBNR to ultimate at age 72 months (all coverages combined). It is assumed that at the time the first retroactive fee adjustment occurs, the valuation estimate (including the IBNR at 72 months) is a "best estimate", and no subsequent adjustments will be required. As the initial adjustment occurs after 1 year, the retroactive claims fee adjustment is discounted 1 year.



This expense is treated the same as the indemnity loss ratio in the estimation of the rate indication.

Section 2.d.2. ULAE – Allowed Claims Adjustment Expenses (a.k.a. "excess legal fee")

The **allowed claims adjustment expenses** by accident year is akin to allocated loss adjustment expense ("ALAE"), except that under the current reporting and allocation methodology, the expense is summed at the jurisdiction and accident year level, and is allocated by business segment (private passenger and non-private passenger) by earned premium.

The Facility Association's Claims Guide (available on Facility Association's portal under the "Manuals" section) provides a list of directly reimbursable claims expenses, separated by "category", with category I being for Tort expenses (first party legal and listed professional fees) and category II for Ontario Accident Benefits Expenses. As described in the Facility Association's Claims Guide:

Category I - Tort

The Facility Association will reimburse the Servicing Carrier in **all jurisdictions** for **first party legal** fees resulting from any one claim occurrence subject to the \$10,000 deductible. The Facility Association will reimburse the Servicing Carrier in **all jurisdictions** for **Professional consulting fees** resulting from any one claim occurrence; it is no longer subject to the \$10,000 deductible, effective July 1, 2004.

Category II - Ontario Accident Benefits Expenses invoiced after October 1, 1994

The Facility Association will reimburse Servicing Carriers for professional consulting fees in Category II as listed in the following schedule on Ontario claims occurring under OMPP, Bill 164, Bill 158 and (Bill 198 or any subsequent legislation) under the Accident Benefits section of the auto policy. Such expenses will not be subject to the \$10,000 deductible.

The allowed claims adjustment expenses are estimated from the latest valuation as a percentage of ultimate indemnity. These expenses apply to Third Party Liability coverages only for Category I and Accident Benefits in Ontario only for Category II (hence, Category II are not applicable to Newfoundland & Labrador).

This expense is treated as a percentage loading applicable to the indemnity loss ratio in the estimation of the rate indication, as applicable by coverage. For Newfoundland & Labrador, this expense applies to TPL only.

Based on the 2015 Appointed Actuary Report Exhibit B.12.1, the 2015 selected excess legal and Professional Fees ratio as percentage of total earned premium was 1.32%. This expense is converted to a percentage loading applicable to the indemnity loss ratio in the estimation of the rate indication, as applicable by coverage (1.6% loading for TPL of non-ppv). The table below is an excerpt from the Indication Exhibit C-1 which shows how this ratio is converted to a percentage of ultimate claim amounts for non-private passenger.

excess legal as percent of TPL indemnity is AA Report = [ratio as % of total coverages EP] x [latest yr total coverages EP] / [latest yr TPL expected indemnity] where ratio to EP from excess legal exhibit, and latest yr EP and TPL expected indemnity from a priori exhibit

				TPL				
2015 AA Rpt		Exh B.12.1		Exh B.8.6		Projected EP		Exh B.5.6.1
		pg 1 selected - cat I		prov, year		Adjustment		pg 1, col [5]
		excess ratio % total EP		2015 all coverage EP		2015 all coverage EP		2015 TPL expected indemnity
1.6%	=	1.32%	х	6,527,092	x	1.000	1	5,336,000



The Appendix D, page 2 of 11 provides the detailed excess legal information from FARM AA Report Final – 2015.

Section 2.e. Premium

Premium information is used to calculate current average rate levels and as weights in the calculation of weighted average changes in average rate levels. The latter premium is the latest 12-month written premium available in the "AIX" data, adjusted for any applicable subsequent rate changes.

Section 2.e.1. On-Level Adjustments

Under the loss ratio approach for determining rate level indications, the earned premium for each accident period and applicable coverage are brought to the current rate level as summarized in Indication Exhibit D-3a (earned premium on-level factor) and Indication Exhibit D-3b (written premium on-level factor).

Facility Association maintains a history of rate changes by jurisdiction, major rating class, coverage, and effective date. This data is accumulated to estimate rate level indices to allow comparison of relative rate levels at different points in time. Relative "written" and "earned" rate level factors are determined by accident year from this data, which are then applied to written and earned premium from the Facility Association AIX data to obtain on-level written and earned premium. The detailed Facility Association Newfoundland & Labrador Taxi rate change history is summarized in the table below:

RATE CHANGES										
		Effective Dates		AccBe	n/UA		Othe	er		
Status	New Bus.	Renewals	TPL (indivis)	AccBen (indivis)	UA	UM	CL	СМ	SP	TOTAL (MUST BE COMPLETED!)
approved	May 1, 1987	May 1, 1987					3.4%	3.4%	3.4%	0.2%
approved	Jul 1, 1990	Jul 1, 1990					13.6%	17.1%	9.7%	0.8%
approved	Nov 1, 1991	Nov 1, 1991					2.5%	19.6%	18.6%	0.7%
approved	Jul 1, 1992	Jul 1, 1992					-	-	-	-
approved	May 1, 1993	May 1, 1993					(7.0%)	(0.5%)	16.8%	0.2%
approved	Sep 1, 1994	Sep 1, 1994					-	0.9%	30.6%	0.7%
approved	Feb 1, 1996	Feb 1, 1996					(33.5%)	(24.0%)	7.7%	(0.9%)
approved	May 1, 1997	May 1, 1997					(10.6%)	(5.5%)	0.4%	(0.3%)
approved	May 1, 2002	May 1, 2002					(0.2%)	(30.2%)	(33.1%)	(1.1%)
approved	Sep 1, 2003	Sep 1, 2003					(11.5%)	(17.0%)	(23.1%)	(1.0%)
approved	Aug 1, 2004	Aug 1, 2004					(31.6%)	(19.0%)	(16.0%)	(1.4%)
approved	Aug 1, 2005	Aug 1, 2005					(5.0%)	(5.0%)	(5.0%)	(0.3%)
approved	Feb 1, 2006	Feb 1, 2006					-	-	-	-
approved	Jun 1, 2010	Jun 1, 2010					(13.1%)	(29.8%)	(35.9%)	(1.8%)
approved	Jan 1, 2012	Jan 1, 2012					-	-	-	-
approved	Aug 1, 2013	Aug 1, 2013	50.0%	100.0%	100.0%					49.7%
approved	Jan 1, 2014	Jan 1, 2014					(10.0%)	(10.0%)	(10.0%)	(0.7%)
approved	Jun 1, 2014	Jun 1, 2014					(13.1%)	11.1%	(24.5%)	(0.6%)
deemed approved	Jun 1, 2014	Jun 1, 2014					23.0%	-	-	0.8%
deemed approved	Jun 1, 2015	Jun 1, 2015					-	-	-	-
approved	Sep 1, 2015	Sep 1, 2015	17.4%	129.1%	136.5%		(9.4%)	1.3%	1.3%	19.3%
deemed approved	Nov 1, 2015	Nov 1, 2015					(0.1%)	(0.3%)	(5.1%)	(0.1%)
approved	Jun 1, 2016	Jun 1, 2016	27.4%	81.6%	131.3%		(27.2%)	(18.4%)	19.2%	28.9%
approved	Nov 1, 2016	Nov 1, 2016					3.1%	2.7%	4.3%	0.2%
approved	Mar 1, 2017	Mar 1, 2017	24.6%	42.2%	50.9%	-	(9.4%)	(2.0%)	(1.3%)	25.7%

Section 2.e.2. Premium Trend

Premium trend has been included for the changes over time ("drift") in limit, deductible, and vehicle rate group. The combined calculation is determined in Indication Exhibit D-4a.

Limit drift is applied to TPL to account for shifting policy limits over time, as shown in Indication Exhibit D-4b.



Deductible drift is applied to CL, CM, and SP to account for shifting policy deductibles over time, as shown in Indication Exhibit D-4c.

Vehicle rate group drift is applied to CL, CM, and SP to account for shifting of vehicle rate groups over time, as shown in Indication Exhibit D-4d. Since the physical damage coverage for taxi is fully dependent on the Private Passenger rates, the rate group drift for taxi is assumed to be similar to the Private Passenger rate group drift. (see Appendix D, pages 8 to 11).

Section 2.e.3. Other Adjustments

No other adjustments are made.

Section 2.f. Other Expenses

Expense assumptions are outlined in Indication Exhibit G-1. The expense assumptions are provided below as a percentage of premiums, derived from the Facility Association Plan of Operation, effective December 2012, and the December 2015 Facility Association Participation Report for Newfoundland & Labrador. "Fixed" expenses are those that do not vary directly with premium or rate levels, but instead vary more closely with exposures (i.e. vehicle counts) – examples include the cost of motor vehicle reports and per-vehicle health levies. These expenses are converted to a percentage of "current rate level" premium and handled similar to loss ratios in the rate indication process. In contrast, "Variable" expenses have a direct relationship with premium – examples include commissions and premium taxes. By their nature, "Variable" expenses are expressed as a percentage of premium as a loading in the rate indication process. Expense assumptions derived from Facility Association experience are based on non-private passenger business segment amounts.

Section 2.f.1. Exposure Variable Expenses, excluding claims fess (Fixed)

The following tables show the fixed expenses as percentages of premium at current rate levels for Taxi:

Fixed Expenses as % of Premium for NL PUB - TX								
	Fixed Expense							
	for TPL	for Other Coverages						
	[1] [2]							
Category	Exh G-1, column [A]	Exh G-1, column [A]						
Driver Record Abstracts	1.34%							
Bad Debt	-	-						
Central Office	2.50%	2.50%						
Health & Other Levy	-							
Total	3.84%	2.50%						

Detail supporting the fixed expense provisions is provided in Indication Exhibit G-1, with additional detail provided in Indication Exhibit G-2.

The Driver Record Abstracts expense assumption is estimated from actual expenses incurred (including applicable taxes) for obtaining the following "Driver Record Abstract" reports:

- "AutoPlus" reports to obtain new business applicant's insurance policy and claims history (per vehicle basis), and
- Motor Vehicle Reports (MVRs) to obtain up-to-date information related to individual drivers (i.e. a "true" driver record abstract) requested on all policies that is, both new business and renewals.



The current costs for obtaining these reports (including associated taxes) are provided in the table below:

	AutoPlus			MVR			
Jurisdiction:	Cost	Tax	Total	Cost	Fee	Tax	Total
NL	6.25	1.15	7.19	17.00			17.00

As "AutoPlus" applies only to new business (and is already on a "per vehicle" basis), the "average" per vehicle cost for AutoPlus is adjusted for the anticipated ratio of new business to renewal vehicles.

"MVR" costs above (which are on a "per driver" basis) are converted to a "per vehicle" basis based on the assumed number of drivers / reports required over a 12-month period (if a new driver is added to an in-force policy mid-term, that new driver's MVR will be obtained). Please see Appendix D, page 7 of 11 for details on this conversion.

The sum of the two projected "per vehicle" costs then represents the total per-vehicle projected costs for Driver Record Abstract reports. For Taxis, this sum is estimated at \$69.69 per vehicle (Appendix D, page 7 of 11) and this fixed cost per vehicle is converted to a percentage of current on-level TPL premium in Indication Exhibit G-1 rows [24] to [26].

Section 2.f.2. Premium Variable Expenses, excluding claims fees (Variable)

The following expenses are expressed as a percentage of premiums and are treated as variable expenses for TX:

Variable Expenses as % of Premium for NL PUB - TX				
	Variable Expense			
	for TPL	for Other Coverages		
	[1]	[2]		
Category	Exh G-1, column [A]	Exh G-1, column [A]		
Commission	6.00%	6.00%		
Premium tax	5.00%	5.00%		
Servicing carrier operating cost	9.00%	9.00%		
Servicing carrier fees	1.00%	1.00%		
Premium finance admin expense	-	-		
GISA Levy (% of ALL COVERAGES				
premium)	0.06%	0.06%		
Rate Regulatory Levy (where it is % of ALL COVERAGES premium)	0.13%	0.13%		
Health Levy (where it is % of ALL COVERAGES premium)	-			
Total	21.19%	21.19%		

Detail supporting the variable expense provisions is provided in Indication Exhibit G-1, with additional detail presented in Indication Exhibit G-2.

We include a provision for the GISA levy. We have confirmed with IBC that the GISA's annual industry assessment is determined using DWP obtained from annual returns (P&C-1 and P&C-22 as applicable). As these amounts include FARM DWP allocated to members, FARM premium attracts the levy and therefore a provision for such is appropriate.

Similarly, we include a provision for the Rate Regulatory Levy based on NL PUB "2014-2015 Automobile Insurance Annual Report" that is the most recent available report when FA's indications are completed. Again, our understanding is that the assessment is based on DWP obtained from annual returns (P&C-1 and P&C-22 as applicable). As these amounts include FARM DWP allocated to members, FARM premium attracts the levy and therefore a provision for such is appropriate.



Premium Financing Fees and Associated Administrative Expenses

Because Service Carriers are responsible for the financial arrangements with policyholders, Facility Association does not receive any revenue nor incur any costs nor account for any capital associated with financing of insurance premiums. As result, no provision for revenue, costs, and capital associated with premium financing is included in the determination of rate level need, which is consistent with the current practice of these amounts being incurred /retained / funded by the Servicing Carriers.

We understand the general rationale for regulators requiring inclusion of premium financing fees as an expense offset in insurer rate applications, as those insurers are usually unable to separate out the administrative costs associated with offering premium financing. As such, to ignore such fees within those rate filings would imply that those insurers would recover premium financing administration expenses both directly from financing fees charged to policyholders, and indirectly through an expense provision embedded in their rates (i.e. the expense provision embedded in those rates include a loading for administration expenses associated with offering premium financing).

However, this rationale does not apply to Facility Association. As Facility Association does not directly offer policyholders premium financing, Facility Association's administration expenses do not include any expenses related to offering premium financing. Any premium financing offered to Facility Association's policyholders is offered by Facility Association's Servicing Carriers directly, and any fee collected would offset any associated administration expense incurred by those applicable Servicing Carriers. To reflect premium financing fees as an offset to expenses that are not incurred by Facility Association creates the "opposite" of the double-dipping concern a regulator might have in relation to other insurers, as described in the preceding paragraph. That is, Facility Association would be required to recognize and "offset" the fee revenue it does not collect in relation to administrative expenses it does not incur. This effectively means that Facility Association is not allowed to account for all of the administrative expenses it does expect to incur through the provision of automobile insurance.

Section 2.g. Profit Provision and Return on Investment

Section 2.g.1. **Profit Provision**

The Facility Association overall target indication reflects a target after-tax return on equity of 12% (as provided by the Facility Association Board of Directors), capital required based on a ratio of premium-to-surplus ratio of 2:1, along with an income tax rate assumption (30.0%) and a before-tax return on investment (net of expenses) assumption of 0.47% as estimated based on estimated future cash flows and investment returns. However, management's proposal is based on an assumption of 0% cost of capital and 2.8% before-tax return on investment, as per management's understanding of regulatory constraint related to these returns.

Section 2.g.2. Premium Delay

Premium is assumed to be collected with a 1.6-month delay, in keeping with the Facility Association's Plan of Operation, where the delay reflects the allowed delay between broker collection of premium from the ultimate policyholder, to submission to the applicable Servicing Carrier, to ultimate deposit into the applicable Facility Association bank account. This estimated delay does NOT take into account any "delays" related to premium financing – that is, we assume that all premium proceeds are transferred to Facility Association as if they were single, full term payments.



Please see Appendix D, page 11 of 11 for the calculation of the delay assumption, and Indication Exhibit G-1 for impact of the delay assumption on premium / expenses.

Section 2.g.3. Return on Investment / Discount Rate Considerations

Losses are assumed to be paid in the middle of the year. Loss payment patterns are determined from the Facility Association quarterly development exhibit as of June 30, 2016 and are summarized in Indication Exhibit F-2.

The net discount rate of interest 0.47% as the Facility Association actuarial assumption⁷ was selected giving consideration to several factors, including:

- Recent (October 31, 2016) Bank of Canada selected marketable bonds average yields for 1-3 year, 3-5 year, 5-10 year and over 10 year
- Recent (October 31, 2016) Bank of Canada selected treasury bill yields for 3 months
- Average investment duration based on the claim payment patterns
- Estimated investment expenses

Please see Indication Exhibit H-1 for additional detail.

In late June 2005, the Facility Association Board of Directors authorized the transfer going forward to member companies of funds not required to meet Facility Association's short term cash flow needs, thus allowing member companies to invest these funds based upon their own investment plans and policies.

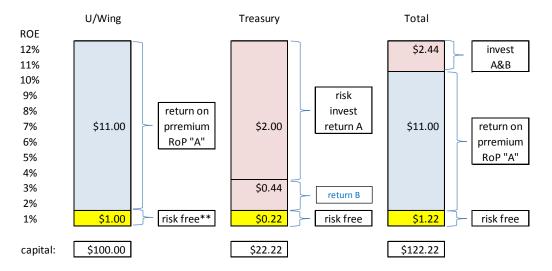
This change in Facility Association's cash management plan was implicitly considered in the selection of the discount rate. Member companies may hold invested assets other than the "risk-free" (that is, free-of-default-risk) portfolio we considered, and may then generate a return that is different than the risk-free return we have assumed. To the extent that members hold "riskier" investments and are able to generate a higher return over the longer as a results, those members would be required to hold more capital to reflect the risk embedded in the value of the asset. Our capital level is assumed to be consistent with a risk-free portfolio of assets.

It is FA's view that any investment return in excess of a "free-of-default-risk" return generated on funds supporting the insurance operations should ipso facto be to the benefit of the capital provider and not to insurance policyholders. The capital provided is a buffer to ensure that policyholders are more likely to be provided the protection (i.e. paid indemnification for insured events) where it turns out that the premium collected (and the investment returns on the associated cash flows) are insufficient to meet the full cash flow requirements. We call this the "performance obligation guarantee".

The policyholder does not provide the capital, nor is the policyholder exposed to the downside risk of investment returns in securities other than "free-of-default-risk" return. As such, it is FA's position that the policyholder should not benefit from returns on policyholder provided funds and/or capital in excess of "free-of-default-risk" return. We display this in the diagram below:

⁷ While this is the Facility Association actuarial assumption, the proposed rates reflect the regulatory floor imposed on the RoI assumption (that is, the ROI assumption must be no lower than 2.8%, which we understand is pre-tax and net of investment expenses).





\$22.22 = \$2 / (12% - 3%)

*return on premium reflects both underwriting profit and investment returns on policyholder funds at a free-of-default-risk

**risk-free here refers to

"free-of-default-risk"

risk investment return A is the additional 2% risk return on \$100 initial capital via over risk free (1%)

risk investment return B is the additional 2% risk return on \$22.22 "additional" capital via over risk free (1%)

\$22.22 "additional" capital set so that \$2 of additional risk return on \$100 initial capital generates a 9% return (9% being difference between target ROE of 12% and total investment return of 3% when risk return included)

In the diagram, capital is provided to underwriting to support issuance of policies, with the capital investment return provided to underwriting at the "free-of-default-risk" return rate (and it is assumed that policyholder funds will likewise be invested at "free-of-default-risk" returns). We have assumed here a target ROE (where "equity" is synonymous with "capital") of 12%, and a "free-of-default-risk" investment return of 1%. In order to get the 12% ROE, the total return on capital provided by policyholder funds (from both underwriting income and investment income) would need to be 11% (and is referred to in the diagram as "return on premium RoP "A"), with the remaining 1% target return on capital being provided by investment return on that capital (for ease, we've also included the associated dollar amounts, assuming \$100 of capital required to support the underwriting operations).

As a separate function, "treasury"⁸, is responsible for actual investment activity on all invested funds and would be likewise charged with a target return of 12% ROE, where the "capital" is required to support any investment in **other than** "free-of-default-risk" securities.

As an example, in choosing to assume a higher level of investment risk, invested capital supporting the underwriting operation could be invested at 3% instead of 1%, but risking:

⁸ In the specific case of FA, "underwriting" is at FA, while "treasury" or "investment" is at the member company level where the capital is actually maintained and invested.

⁹ Provided as an example.



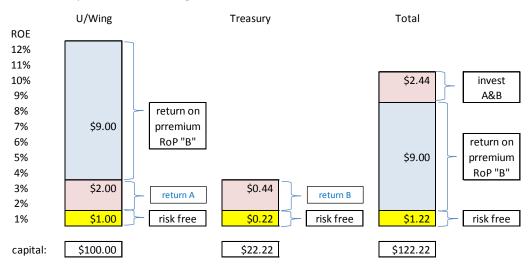
- liquidity (i.e. having to liquidate capital at an investment loss to meet unfunded cash obligations)
- reinvestment (i.e. as securities mature and need to be reinvested, they are reinvested at lower yields)
- default (or a "credit event" i.e. security issuers default in whole or in part on coupons and/or principal when they come due)
- other market/credit risks.

Assuming policyholder funds are invested "free-of-default-risk" but capital is invested in risk-assets that generate a 3% total return, the 3% return on the initial \$100 of capital would generate an additional \$2 of return over the \$1 return generated at "free-of-default-risk". Treasury would consider then the amount of "additional" capital that would be required to support this additional return. Assuming the additional capital would also be invested at 3%, so long as the additional capital required is no more than \$2 / (12% - 3%) or \$22.22, it would make sense for treasury to make the investment (they would get \$2 of additional return on the initial \$100, plus $3\% \times 22.22 or \$0.66 for a total return of \$2.66 on \$22.22 of capital, for a return of 12%).

On the other hand, if the capital required to support the investment at 3% is more than \$22.22, the company would be better off giving access to that \$22.22 capital to underwriting to write more insurance (generating at 12% ROE).

Note that under this scenario, underwriting has no vested interest in the investment activities, specifically whether or not investment risk activities are taken (so long as it is properly capitalized to reflect the inherent riskiness of the activity relative to the firms overall risk appetite, tolerance, and limits).

If, instead, the \$2 of additional risk-return on invested capital were to accrue to the benefit of the policyholder (in the form of lower premium), the diagram above would instead look like the one shown below:



¹⁰ We make this assumption to simplify the discussion – otherwise, we have to introduce how much of the original return on premium is generated from underwriting profit and how much from investment income on policyholder funds, and for the latter, we need to make an assumption regarding the average duration of the policyholder funds. This is all doable, but risks losing the message in the detail.

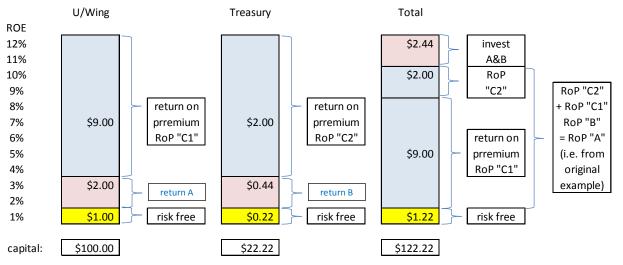


Under this scenario, treasury is unable to capture the investment risk return on the initial capital of \$100 (while it is captured as part of "underwriting's return", it is in fact given to the policyholder in the form of lower premium¹¹). Note that here, the underwriters would have a vested interest in treasury's investment activity, as more "risky" activity will allow underwriting to reduce premium's charged – but all of the additional risk is borne by treasury (here, it would be underwriting putting pressure on treasury to increase yield that would potentially be problematic for an insurer – note that this is not an issue for FA as FA's mission is to be as small as possible).

Also note, importantly, that under this scenario, the company in total does not meet its overall 12% ROE target (it gets to 10%). Again, this is because part of its overall return was "given" to the policyholder.

Under this scenario (and assuming management can keep underwriting from pressuring treasury), the optimum strategy is NOT to invest the capital supporting underwriting at 3%, but instead give the additional \$22.22 of capital to underwriting to write more business at the 12% ROE, ensuring that the total \$122.22 would generate the target 12% ROE (again, this doesn't directly apply to FA as FA's mission is to be as small as possible).

Alternatively (and again, this wouldn't apply to FA), management could have treasury seek the additional "rent" from the policyholder as indicated below:



The above is a simple "re-package" of the original scenario, although it is, in our view, more convoluted and makes it more difficult to see clearly "who owns what". In addition, this approach could not apply to FA, as treasury (i.e. members) would not be able to extract the "rent" from the FA policyholders.

The same argument applies if one were to expand the investment in non-free-of-default-risk investments to policyholder funds. This would require additional capital by treasury to support as discussed above where only capital was invested in non-free-of-default-risk investments.

¹¹ For ease of discussion, we ignore here that all else equal, offering lower premium to the policyholder for the same underwriting risk would require more capital to be provided to support underwriting. Capital to support underwriting is the amount required to guarantee performance of the insurance obligation to a set level of probability. In our initial case, the funding available to support the guarantee consisted of the initial \$100 of capital plus the \$12 expected return on that capital (i.e. \$112 in total). These funds would be associated with a specific probability of fulfilling the performance guarantee. If less premium is charged, the "return" will be less than \$12 so that the total funding available would be less than \$112. To maintain the performance guarantee probability, additional capital would be required to make up the funding shortfall to get it back to the \$112 target level.



In addition to the above discussion as relates to the use of a "free-of-default-risk" return as being appropriate, it is also important to emphasize that rate making is a forward looking (i.e. prospective) exercise. As such, investment yields achieved historically do not imply the levels that will be achieved going forward (notwithstanding the fact that the historic yields earned by the industry were not strictly based on "free-of-default-risk" securities). We believe the best estimate of prospective yields are "current yields" available.

While we selected a net return on investment / discount rate of 0.47% based on current risk-free yields, management has based the proposed rate change on an indication based on an assumption of a 2.8% return on investment, being the lowest level within the PUB published benchmark range.

Section 2.h. Credibility

Section 2.h.1. Credibility Standard

Credibility is assigned on the basis of estimated ultimate number of claim counts over the years that are given non-zero weight in our rate indication. This total is then applied to the traditional square root formula.

The Facility Association's full credibility standards used in this analysis are as follows:

Coverage	FA Actuarial Standard	
TPL	3,246	
BI	2,164	
PD	1,082	
DCPD	1,082	
AccBen	2,164	
UA	2,164	
UM	2,164	
CL	1,082	
СМ	1,082	
SP	1,082	
AP	1,082	

The selected credibility standards remain unchanged from our prior three filings (March 2014, May 2015, and March 2016). However, there was a change in the full credibility standards introduced with these filings in relation to the 2013 filing. The PUB's decision in relation to these filings rejected the change in the full credibility standards on the basis of a lack of support for the change.

Support was provided in our May 2015 and March 2016 filings and has been re-produced here, along with some additional detail. We believe this supports our selections.

The 2013 full credibility standards were selected by Facility Association's former external actuarial services provider (Eckler) based on a study they completed in 2004 using 2003 Atlantic Commercial Vehicle data. In this study, for each coverage/sub-coverage, a measure of severity volatility (the ratio of severity variance to the square of the mean severity) was estimated for each of 3 accident years (1999 to 2001) for each coverage/sub-coverage. The by-coverage/sub-coverage severity volatility measures were averaged over the 3 accident years and this average was compared to the same average for collision coverage (where collision was taken as the "base" coverage and assigned a full credibility claim count level of 1,082). The relative selected levels from this study by coverage/sub-coverage were as indicated below:



coverage / sub-coverage	selected 1,082 multiplier
bodily injury	2
property damage	3
third party liability	5
collision	1
comprehensive	3

Accident benefits, uninsured automobile, and underinsured motorist coverages were assigned the same level as bodily injury (i.e. 2 times), and specified perils was assigned the same level as comprehensive (i.e. 3 times).

As indicated above, third party liability being set at 5 times 1,082 was driven by the selected multiplier for property damage (which at 3 times seems counterintuitive in relation to multipliers for bodily injury and collision). The multiplier used in relation to the PUB's published benchmark for PD and CM is 1 suggesting that the PUB would also view a multiplier of 3 as being "high" relative to their own published benchmark, and we fully would agree with this.

During 2013, the credibility standards across all jurisdictions and rating classes were reviewed, including those used in NL. As the Atlantic provinces standards were based on Eckler studies (separately for PPV and CV), whereas no other jurisdictions were similarly supported, we reviewed the Eckler study in some detail to determine whether or not the study should be updated, particularly in light of the "unusual" results indicated above where PD and CM were given higher multiples than what were viewed as the "intuitive" factors (being 1 for both). Our conclusion was that the study should NOT be updated, and the results from the study should be abandoned for the following reasons:

- The original Eckler study used accident years 1999 to 2001 inclusive, as at December 31, 2003. At that time, the coverage provided by the third party liability ("TPL") coverages (bodily injury and property damage) were generally consistent across the Atlantic provinces and hence it would be reasonable to conclude that TPL claims across those provinces are random instances from a single "population" of such claims. However, product reforms introduced across each of these jurisdictions around 2004 and subsequent makes this assumption less convincing, particularly with respect to NL which adopted reforms that were significantly different than the other jurisdictions.
- Individual claims were not available claims aggregated by size had to be used this reduces the
 effectiveness of the study (and requires additional assumptions about the claims variation within the size
 bands).
- In order to combine accident years for the report, "trends" would have to be applied. In order to eliminate this issue, each accident year is viewed separately. However, this raises two additional issues: there are too few claims in each accident year (more on this later) and it is then assumed that the coefficient of variation is a constant (that is, variance is proportional to the mean in a linear way) if this assumption is not correct, it may be appropriate to transform the data prior to the analysis.
- Another implicit assumption is that changes in limits purchased (for TPL) and deductible levels (for collision / comprehensive / specified perils / all perils) is consistent overall and by jurisdiction and rating class. Changes in these levels will have an impact on both the mean and the variance of the samples.



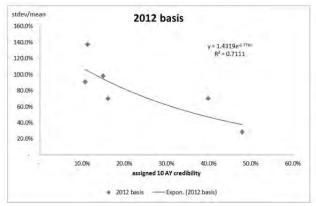
- As previously discussed, the original Eckler study's result for property damage did not make intuitive sense. The vast majority of property damage claims under TPL result for damage to the third party's vehicle. In comparison, collision claims reflect damage to the at-fault driver's vehicle. In both cases, claims reflect vehicle damage. It is not intuitively clear why it would be assessed that the severity coefficient of variation (the measure used in the study to reflect the volatility it is simply the severity's estimated variance divided by the estimated mean) would be 3 times that of collision, as it is all vehicular damage. Further, the resulting multiplier was higher than that determined for BI. The results do not make intuitive sense. As previously discussed, the PUB's own benchmark multiplier is 1, which is aligned with our intuitive position.
- Similarly, the Eckler study indicated that comprehensive (again, vehicle damage) severity coefficient of variation was 3 times collision. This simply does not intuitive sense now to FA. As previously discussed, the PUB's own benchmark multiplier is 1, which is aligned with our intuitive position.
- The underlying rationale for this approach (using the coefficient of variation) relies on the Central Limit Theorem (i.e. the law of large numbers) that the distribution of observed severity can be approximated by a normal distribution, if the number of claims is sufficiently large. Numerous studies have found that claims severity does not follow a normal distribution, so the underlying assumption is not valid.
- Even ignoring the above (i.e. let's assume that claims severity does follow a normal distribution), the Central Limit Theorem then applies for sufficiently large number of claims. Our view is that the number claims available and used in the original study are not sufficiently high in order to adequately assess the "population" coefficient of variation. Put another way, when taking samples from a population, the sample will have a higher variance (i.e. volatility) than the population it is drawn from.
- Finally, and tied to the above, the original Eckler study indicated a higher number of claims needed for
 "full credibility" than is available for any individual accident year. For example, the "base coverage"
 collision is determined by OW to need 1,082 claims for "full credibility", yet none of the individual
 accident years had this many claims (and therefore would not be considered "fully credible"). Again, if
 the 3 accident years were to be combined (so that the total number of claims in a "single" study were
 greater than 1,082), trend would need to be applied, and differences in limits / deductibles accounted
 for.

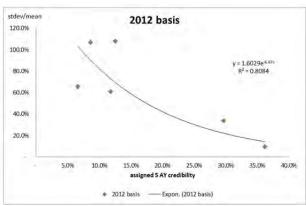
All of these considerations (as well as others) led to FA's decision not to update the study, and instead select full credibility levels we felt provide an appropriate and reasonable balance between the FA experience (at the rating class level) and the complement of credibility FA intended to use. Further, it was decided to update all full credibility standards in all jurisdictions and all rating classes to the same level, with coverages / sub-coverages set at a "long tailed" coverage level of 2 times, or a "short-tailed" coverage level of 1 times. In relation to the Eckler study, this reduced the property damage, comprehensive, and specified perils multipliers from 3 times to 1 times. This, in our view, makes more intuitive sense than the prior selections and makes our change from the previous "non-intuitive" result to a more reasonable and intuitive result.

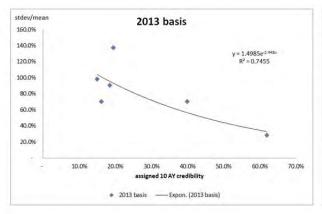
In response to the above arguments presented in relation to our 2015 Taxi rate filing, OW attempted to update the Eckler study using more recent data. That study, in our view, is not valid for the reasons we indicated above. Further, the OW study did not separately analyze BI and PD, but instead modeled BI and PD combined as TPL. This did not replicate the Eckler study. No rationale for this was provided. Further, the OW study did not address any other coverage (like CM) and so was incomplete. The study also did not attempt to address differences in coverage post 2004 reforms in the Atlantic provinces, or any of the other issues indicated above, that, in our view, negate any results or conclusions that can be drawn from the study.

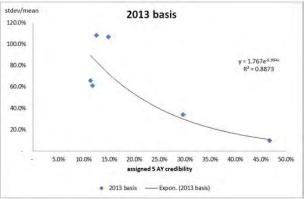


As previously indicated, the Eckler study used the ratio of severity variance to the square of the mean severity as the measure of volatility. A similar but alternate volatility measure is the ratio of standard deviation to the mean (commonly referred to as the Coefficient of Variance or "CV"). As the credibility is effectively applied at a loss cost level, we reviewed the relationship between this alternate volatility measure (using on-level loss costs) and the assigned credibility using the "2012 basis" levels (first two charts below) and the current "2013 basis" levels (second two charts below) for our 2013 and 2014 studies. The left charts use 10 accident years and the right use 5 accident years. We fitted an exponential curve to these results. The associated fits (as measured by the R² value) show a better fit in both cases (i.e. if we use 10 accident years or 5 accident years) with the 2013 basis.









We believe that our alternate measure (CV) as fitted and shown in our charts above is a valid alternative and we believe supports our position and change. Explicitly, the credibility standards determined by the 2003 Eckler study are no longer supported nor used by FA.

The reduced multipliers have the impact of giving more weight to the actual experience. Where the projected loss ratio based on experience is lower than the "credibility complement" projected loss ratio, the updated full credibility levels will result in a lower indication than if the change was not made. Similarly, if the projected loss ratio based on experience is higher than the "credibility complement" projected loss ratio, the updated full credibility levels will result in a higher indication. Finally, if the experience period had no claims or if the

¹² For the purposes of this discussion, "2012 basis" refers to the full credibility standards used in rate filings prior to 2013 and as completed by Eckler on behalf of Facility Association. The "2013 basis" reflects the basis introduced and used subsequently.



projected loss ratio based on experience was the same as the "credibility complement" projected loss ratio, the updated credibility levels would have no impact on the indications.

During the 2014 rate review cycle, Facility Association completed 166 rate reviews across various jurisdictions, rating classes, and rating types. Focusing on the impact of the change in full credibility for third party liability, we have estimated that in 25% of reviews, the change had no impact on the indication and in 55% of the reviews, the change resulted in a lower indication than if the change was not made. In the remaining 20% of reviews, the change resulted in a higher indication (see summary below):

Estimated Impact of reducing the full credibility claim count for BI, in relation to the 2014 rating cycle indications – **all jurisdictions**

lower ind	66	166	tota
	33 19.9%	33	
summary of impacts.	92 55.4%	92	
summary of impacts: zero	41 24.7%	41	summary of impacts:

This clearly shows that the overall impact of the change is favourable to Facility Association policyholders. With respect to Newfoundland & Labrador reviews during the 2014 rate review cycle, 18 reviews were completed. Of these, the change was estimated to have no impact on 22% of the reviews (with respect to TPL indications), and 39% of reviews resulted in lower indications and 39% resulted in higher indications (see table below). Again, clearly, this shows that the change is unbiased in this jurisdiction.

Estimated Impact of reducing the full credibility claim count for BI, in relation to the 2014 rating cycle indications – **Newfoundland & Labrador only**

summary of impacts:	zero	4 7 7	22.2%
	lower ind	7	38.9%
	higher ind	7	38.9%
total	# of reviews:	18	

Finally, based on the 2013 and 2014 rate review cycles, Facility Association submitted 20 rate filings requiring full actuarial support in 6 of the 9 jurisdictions we operate in, which have been decided upon by the applicable regulatory body (8 in Ontario, 4 in Alberta, 2 in Newfoundland & Labrador, 1 in New Brunswick, 4 in Nova Scotia, and 1 in Prince Edward Island). The change in full credibility levels has been accepted in all of these submissions, bar the two submissions in Newfoundland & Labrador.

In addition to the above, Facility Association has filed more than 70 rate changes requiring actuarial support for various rating classes and jurisdictions since the change was implemented, and there have been no issues related to this change in other jurisdictions, other than a 2015 taxi filing in Nova Scotia where we presented sufficient evidence to the staff to support the position that this change was not "biased" to generate higher rate indications (and were subsequently accepted by the regulator).

The credibility determined for each coverage is summarized in Indication Exhibit E-1.

Section 2.h.2. Credibility - Complement of Credibility

To the extent that Facility Association's experience by coverage used in the process described in the previous section is not deemed fully "credible" (due to a lack of claims, by count, estimated in the experience period



used), a "complement" projected on-level loss ratio is required to augment the projected ratio. The "complement" used is either:

- the estimated credibility weighted target nominal indemnity loss ratio from prior analysis, adjusted by the rate change approved by the regulator and projected forward to the future policy period via premium and claims trends (projecting forward the loss ratio from prior filing); or
- an estimated loss ratio determined assuming that the current rates underlying the "expiring" policy term
 are adequate in relation to the allowed return for Facility Association (being a 0% cost of capital basis for
 Newfoundland & Labrador) and an assumption set applicable to the "expiring" term, and projected
 forward to the future policy period via premium and claims trends (projecting forward the loss ratio
 underlying current rates).

The former is used where Facility Association has submitted a rate filing within the last two-to-three calendar years for the rating class under consideration. Where it is has been more than two-to-three calendar years, the implicit assumption is that the "expiring" policy term rates were deemed "adequate" (relative to the allowed return) at the last rate review, eliminating the need to submit a rate filing.

For Newfoundland & Labrador Taxi, as a rate filing was last submitted in March of 2016, the former approach (projecting forward the loss ratio from prior analysis) was undertaken.

The balance of credibility approach promotes stability between successive rate reviews, while allowing for appropriate recognition of a changing environment.

While management supports the Facility Association actuarial approach and assumption, management's proposed rate change is based on the indication that uses the FA's projected loss ratio from the March 2016 rate filing as complement.

The detailed calculation of complement of credibility is shown in Indication Exhibit C-2 and Indication Exhibit C-3.

Section 2.i. Other Adjustments

There are no other adjustments.

Section 2.j. **Summary Rate Level Indications**

The table below summarizes the rate indications and the proposed rate changes. The proposed rate changes are based on an indication assuming a 2.8% ROI and 0.0% cost of capital.

Summary of Rate Level Indications for NL PUB - TX						
	FA Indication with Target after-tax ROE 12.00%	FA Indication with Cost of Capital 0.00%	Alternate Indication Based on 0% Cost of Capital and 2.8% RoI	Proposed Rate Change		
	[1]	[2]	[3]	[4]		
	Exh C-1, column [M], row	Exh C-1, column [M], row	Exh C-1, column [M], row	Exh C-1, column [M], row		
Coverage	[22]	[30]	[35]	[35]		
Third Party Liability	58.3%	40.9%	=	=		
Accident Benefits	45.7%	29.6%	22.8%	22.8%		
Uninsured Automobile	82.2%	62.1%	53.7%	53.7%		
Underinsured Motorist	n/a	n/a	n/a	n/a		
Collision	3.5%	(7.9%)	(9.3%)	(9.3%)		
Comp	0.9%	(10.2%)	(11.8%)	(11.8%)		
Specified Perils	6.4%	(5.3%)	(7.0%)	(7.0%)		
All Perils	n/a	n/a	n/a	n/a		
Total	56.6%	39.4%	29.7%	29.7%		



The derivation of the rate changes is summarized in Indication Exhibit C-1 and described in the sections below.

Section 2.j.1. Projected Loss Ratio (indemnity only, nominal) Underlying Current Rates

As described in Section 2.h.2, an estimated loss ratio is determined based on the results of our prior filed indication, (taking into account our indicated change and the actual approved change), projected forward to the future policy period via premium and claims trends (detailed calculation is provided in Indication Exhibit C-2).

Section 2.j.2. Projected Loss Ratio (indemnity only, nominal) Based on FA Experience

The projected loss ratio based on Facility Association experience is calculated as the ultimate trended losses divided by the FA earned premium at current rate level (the detailed calculation is provided in Indication Exhibit D-1).

As described in Section 2.e, earned premium and ultimate indemnity amounts for the most recent 5 accident years are adjusted by on-level factors and trended forward to the future policy period. Ultimate indemnity amount projection factors are determined from the selected loss trend models to reflect the loss trend, seasonality, impact of the product reforms, and other changes as indicated by the data. The detailed loss adjustment factors are described in Section 2.b.3.

Section 2.j.3. Credibility-Weighted Projected Loss Ratio (indemnity only, nominal)

This is calculated as a credibility-weighted average of the projected loss ratio underlying current rates and the projected loss ratio based on Facility Association experience. Credibility weights are determined in Indication Exhibit E-1.

Section 2.j.4. Discounted Projected Loss Ratios

Coverage-level credibility weighted projected loss ratios (adjusted to include excess legal fee as appropriate) are adjusted to an estimated "discounted" basis via application of discount factors based on the selected yield curve and on the projected claim emergence pattern (the latter allowing for variation by coverage), resulting in discounted projected loss ratios (indemnity & excess legal) at the coverage level. Indication Exhibit F-1 shows a detailed calculation of the discount rate and Indication Exhibit F-2 shows a detailed calculation of the discount factor by coverage.

Section 2.j.5. Expenses and Capital

Expenses are classified as either fixed or variable as per Indication Exhibit G-2.

The amount of capital required to support policies written during the future rating period under consideration is derived based on an assumed 2:1 premium to surplus ratio, where premium is consistent with the Facility Association Board of Directors target return. Capital assumptions are shown in Indication Exhibit H-1.

Section 2.j.6. Rate Indication

The overall indication by coverage is calculated by subtracting 1 from the ratio below:

discounted projected indemnity and excess legal + discounted fixed expenses

discounted premium - discounted variable expenses - discounted service carrier claims fees adjustment - cost of capital

Overall rate indication calculations are shown in Indication Exhibit C-1.





Section 2.k. **Territory Indications**

Section 2.k.1. Indicated Differentials

Not applicable.

Section 2.k.2. Off-balance

No off-balance is required.

Section 2.1. Classification/Limit of Liability/Deductible or Other Rate Differential Indications

Section 2.l.1. Indicated Differentials

Not applicable.

Section 2.1.2. Off-balance

No off-balance is required.



Indication Exhibits – FA Assumptions

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all Exh A-1 Page 1 of 1

Analysis Summary (NB eff 1-Oct-2017; RN eff 1-Oct-	2017)	Third Party Liability	Bodily Injury	Property Damage	DCPD	TPL (indivisible)	Accident Benefits	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils	All Perils	TOTAL
Indication Summary														
FA Average Written Premium, Rolling 12, \$s	Exh C-1, row [3]	2,917	-	-	-	2,917	104	29	-	1,030	336	118	1,388	3,204
Indicated target rate change (12.0% ROE, leverage 2.0)	Exh C-1, row [22]	58.3%	58.3%	58.3%	58.3%	58.3%	45.7%	82.2%	-	3.5%	0.9%	6.4%	(0.3%)	56.6%
AWP dollar change for Indicated target rate change (12.0% ROE, lev	erage 2.0) Exh C-1, row [24]	3,037	-	-	-	3,037	208	145	-	28	3	11	(4)	3,357
Indicated Average Written Premium		5,954	-	-	-	5,954	312	174	-	1,058	339	129	1,385	6,561
Rate change selected by FA	Exh C-1, row [35]	_	30.7%	30.7%	30.7%	30.7%	22.8%	53.7%	-	(9.3%)	(11.8%)	(7.0%)	(12.7%)	29.7%
FA Assumptions except RoI; Alternate rate change	basis (0.0% Cost of Capital, lev	erage 1.80), Ro	at 2.8% (NL PUB	minimum)										
AWP dollar change for Rate change selected by FA	Exh C-1, row [37]	-	-	-	-	1,599	104	95	-	(74)	(40)	(12)	(148)	1,762
Selected Average Written Premium		2,917	-	-	-	4,516	208	124	-	956	296	106	1,240	4,966
Alternate rate change basis (0.0% Cost of Capital, leverage 1.80)	Exh C-1, row [30]	40.9%	40.9%	40.9%	40.9%	40.9%	29.6%	62.1%	-	(7.9%)	(10.2%)) (5.3%)	(11.3%)	39.4%
AWP dollar change for Alternate rate change basis (0.0% Cost of Ca	pital, lever: Exh C-1, row [32]	2,131	-	-	-	2,131	135	109	-	(63)	(34)) (9)	(132)	2,337
Average Written Premium @ Alternate Return Assu	mption capped	5,048	-	-	-	5,048	239	138	-	967	302	109	1,256	5,541
Prior Indication, filed changes, and approved changes														
Indicated Rate Change (12% ROE)		79.7%	79.7%	79.7%	79.7%	79.7%	92.0%	115.3%	-	(3.9%)	10.5%	16.7%	3.9%	79.6%
Filed Rate Change		24.6%	24.6%	24.6%	24.6%	24.6%	42.2%	50.9%		(9.4%)	(2.0%)	(1.3%)	(6.9%)	25.7%
Approved Effective Date: Mar 1, 2017 (NB & RN) - major rate	change	l	24.6%	24.6%	24.6%	24.6%	42.2%	50.9%		(9.4%)	(2.0%)	(1.3%)	(6.9%)	25.7%

Jurisidiction: Newfoundland & Labrador

Vehicle Type: Taxi

Project ID: NL-2016Q4-TX

Exh B-1

jurisdiction (short form): NL major rating class: PUB

minor rating class: TX rating type: all

Exh B-1 Page 1 of 1

Rate Program Parameters

A. In relation to Current	("Expiring") Rates
---------------------------	--------------------

estimated average written date, prior analysis: 01-Apr-2017 [1]

estimated premium trend period (days) between analyses:

estimated from prior analysis

365 [2] = [8]-[1]

estimated average accident date, prior analysis: 30-Sep-2017 [3]

estimated claims trend period (days) between analyses: 365 estimated from prior analysis

B. Proposed Rate Program Effective Dates and # Months in effect

new business average renewals % split 85.9% 14.1%

[5]

[4]

FA download facility (weighted avg 2011-2013 pol

= [12]-[3]

rate program effective dates 01-Oct-2017 01-Oct-2017 01-Oct-2017 [6] assumption, with average based on [5]

mths future rates in effect: 12.0 30-Sep-2018 [7]

=> generates last effective date for rate program

average written date in effective period:

01-Apr-2018 [8]

= average of [6] & [7]

FA download facility

C. Proposed Rate Program Policy Terms

policy term mths: 6 12

> 1.0% 99.0% [9]

first possible accident date: 01-Oct-2017 last possible accident date: 30-Mar-2019 30-Sep-2019

01-Oct-2017

[10] [11]

=[7]+policy term in mths

average accident date:

01-Jul-2018 01-Oct-2018 **30-Sep-2018 [12]**

= total average based on [9]

D. Rate Analysis Trend Basis

USER TO SELECT BASIS FOR PROJECTED LOSS RATIO FOR CREDIBILITY COMPLEMENT:

% split

Select A or B: where: A FA Selected Trend Models (Exh D-5b)

B Regulatory Benchmark Trends (Exh D-5b (ALT))

Resulting Selection Information:

type: FA Selected market: INDUSTRY rating class: CV as at: 31-Dec-15

E. Data Summary

FA Experience: FA AIX [13] AU11

as at: 31-Dec-2015 [14]

Loss Development Factors (LDFs): FA non-PPV val data

[15] as at: 30-Jun-2016 [16]

as per FA valuation, FARM compared to recorded @ 31-Dec-2015

Claims Development Factors (CDFs): FA non-PPV

val data [17]

30-Jun-2016 [18]

[23]

as per FA valuation, FARM

as at:

compared to recorded @ 31-Dec-2015

Trends: Industry AIX [19]

as at: 31-Dec-2015 [20] AU70 as per FA analysis, Industry

Exposure & Premium for Drift Calculations: FA

apps db, AIX [21] 31-Dec-2015 [22] as at:

rate group drift from download facility,

limit and ded from AU11

Rate Level Factors: FA internal as per internal records

as at: 31-Oct-2016 [24]

..\..\..\..\rate changes\FARM\summaries ove

Expenses: FA internal [25] as at: 31-Dec-2015 [26]

as per Participation Reports at cal year-end

FA Indications - Page 4 of 34

Facility Association Residual Market (FARM) experience 2006 2011 20.0% RN eff date: Trend Basis Exh C-1 Jurisidiction: Newfoundland & Labrador accident yr 20.0% Oct 1 2017 jurisdiction (short form): NL type: FA Selected market: INDUSTRY Page 1 of 2 2007 2012 Vehicle Type: Taxi 2008 2013 20.0% major rating class: PUB weights Project ID: NL-2016Q4-TX 2009 2014 20.0% rating class: CV used in dcst rate: minor rating class: TX Exh C-1 indications 2010 2015 20.0% 0.47% rating type: all as at: 31-Dec-15

EXII C-1		Indications	2010	-	2015	20.0%		0.47%		rating type:	all	as at:	31-Dec-12		
Derivation	of Indicated Change in Overall Rate Level		[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[1]	[1]	[K]	[L]	[M]
(\$1s) unless otherwise indicated		Third Party Liability	Bodily Injury	Property Damage	DCPD	TPL (indivisible)	Accident Benefits	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils	All Perils	TOTAL
Facility Associ	ation Exposures & Premium	FA AIX as at: Dec 31 2015					(
[1]	FA Written Exposures, Rolling 12	Exh C-2, row [17]	782	-	-	-	782	673	784		70	121	217	2	784
[2]	FA Written Premium, Rolling 12	Exh C-2, row [20]	2,280,282	-	-	-	2,280,282	69,678	22,902		72,115	40,688	25,632	2,198	2,513,495
[3]	FA Average Written Premium, Rolling 12, \$s	Exh C-2, row [23]	2,917	-	-	-	2,917	104	29		1,030	336	118	1,388	3,204
[4]	FA Written Premium @ Current Rates, Projected to Future Period	Exh C-2, row [34]	4,073,013	-	-	-	4,073,013	306,114	138,002		55,687	40,784	36,739	1,848	4,652,187
[5]	FA Avg Written Premium @ Current Rates, Projected to Future Period, \$s	Exh C-2, row [35]	5,210	-	-	-	5,210	455	176		796	337	169	1,167	5,931
[6]	Premium distribution @ current rates	([4] by coverage)/([4] total)	87.55%	-	-	-	87.55%	6.58%	2.97%		1.20%	0.88%	0.79%	0.04%	100.01%
	ected Loss Ratio (indemnity only, nominal) @ Current Rates														
[7]	Updated projected loss ratio (indemnity only, nominal), prior analysis	Exh C-2, row [14]	89.9%	89.9%	89.9%	89.9%	89.9%	83.2%	95.1%	-	58.1%	62.5%	64.6%	61.2%	88.8%
	Ratio (indemnity only, nominal) based on FA experience														
[8]	FA projected ultimate loss ratio (indemnity only, nominal)	Exh D-1, col [17]	96.9%	96.9%	96.9%	96.9%	96.9%	98.2%	237.1%	-	74.3%	46.6%	48.3%	20.2%	100.0%
Credibility-We	eighted Projected Loss Ratio (indemnity only, nominal)														
[9]	FA experience credibility	Exh E-1, col [8]		49.8%	49.8%	49.8%	49.8%	32.3%	11.0%	-	19.7%	17.7%	9.1%	5.3%	
[10]	Credibility-weighted projected Loss Ratio (indeminty only, nominal)	=[8]*[9]+[7]*(1-[9])	93.4%	93.4%	93.4%	93.4%	93.4%	88.0%	110.7%	-	61.3%	59.7%	63.1%	59.0%	92.6%
Projected Loss	Ratio (indemnity & excess legal, discounted @ 0.47%)														
[11]	Loss discount factor	Exh F-2 (re-wghted)	0.9825	0.9825	0.9825	0.9825	0.9825	0.9872	0.9872	0.9810	0.9952	0.9948	0.9948	0.9952	0.9833
[12]	Credibility-weighted projected loss ratio (indemnity only, discounted)	=[10]*[11]	91.8%	91.8%	91.8%	91.8%	91.8%	86.9%	109.3%	-	61.0%	59.4%	62.8%	58.7%	91.1%
[13]	excess legal as % indemnity	see note 3 below	1.6%	1.6%	1.6%	1.6%	1.6%	-							1.4%
[14]	Cred-wght'd projected loss ratio (indemnity & excess legal, discounted)	=[12]*(1+[13])	93.3%	93.3%	93.3%	93.3%	93.3%	86.9%	109.3%	-	61.0%	59.4%	62.8%	58.7%	92.4%
Discounted Re	evenue, Expenses and Capital Costs														
[15]	Revenue discount factor	Exh G-1, col[C], row[3]	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994	0.9994
[16]	Total discounted fixed expenses, as % of current on-level premium	Exh G-1, col[C], row[30] for TPL, otherwise													
		row[21]	3.84%	3.84%	3.84%	3.84%	3.84%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	3.67%
[17]	Discounted effective commission ratio (based on Indicated rate level change)	Exh G-1, col[C], row[5]	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
[18]	Total discounted variable expenses prem tax, S.C. non-claims fees, as % of premium	Exh G-1, col[C], row[17] for TPL, otherswise	45 400/	45 400/	15 100/	45 400/	15 100/	45 400/	15 100/	15 100/	45 400/	45 400/	15 100/	45 400/	45 400
[40]	Plane and a scalable C.C. to blad algebra for the Winformation	row[15]	15.18%	15.18%	15.18%	15.18%	15.18%	15.18%	15.18%	15.18%	15.18%	15.18%	15.18%	15.18%	15.18%
[19]	Discounted variable S.C. initial claims fee, as % of premium	Exh G-1, col[C], row[18]	9.95%	9.95%	9.95%	9.95%	9.95%	9.95%	9.95%	9.95%	9.95%	9.95%	9.95%	9.95%	9.95%
[20]	Retroactive claims fee adjustment (discounted), as % of premium @ target rate	goal seek to 0 on col [L], row [41]	(0.90%)	(0.90%)	(0.90%)	(0.90%)	(0.90%)	(0.90%)	(0.90%)	(0.90%)	(0.90%)	(0.90%)	(0.90%)	(0.90%)	(0.90%
[21]	Target Return on Premium (i.e. pre-tax return from underwriting, including associated investmen income, as % of premium)	Exh H-1, row[15]	8.34%	8.34%	8.34%	8.34%	8.34%	8.34%	8.34%	8.34%	8.34%	8.34%	8.34%	8.34%	8.34%
Rate Indicatio															
[22]	Indicated target rate change (12.0% ROE, leverage 2.0)	=([14]+[16])/([15]-[17]-[18]-[19]-[20]-[21])-1	58.3%	58.3%	58.3%	58.3%	58.3%	45.7%	82.2%	_	3.5%	0.9%	6.4%	(0.3%)	56.6%
[23]	Avg WP @ Indicated target rate change (12.0% ROE, leverage 2.0)	=[5]*(1+[22])	8,247	-	-	-	8,247	663	321	_	824	340	180	1,164	9,288
[24]	AWP dollar change for Indicated target rate change (12.0% ROE, leverage 2.0)	=[23]-[5]	3,037	-	_	_	3,037	208	145	_	28	3	11	(4)	3,357
[25]	nominal indemnity LR for Indicated target rate change (12.0% ROE, leverage 2.0)	=[10]/(1+[22])	59.0%	59.0%	59.0%	59.0%	59.0%	60.4%	60.8%	_	59.2%	59.2%	59.3%	59.2%	59.1%
[26]	nominal excess legal LR for Indicated target rate change (12.0% ROE, leverage 2.0)	=[13]*[25]	0.9%	0.9%	0.9%	0.9%	0.9%	-	-	_		-		-	0.8%
[27]	discounted commission as % of premium, based on alternate target	Exh G-1, col[C], row[6]	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
[28]	Retroactive claims fee adjustment (discounted), based on alternate target	goal seek to 0 on col [L], row [42]	(0.15%)	(0.15%)	(0.15%)	(0.15%)	(0.15%)	(0.15%)	(0.15%)	(0.15%)	(0.15%)	(0.15%)	(0.15%)	(0.15%)	(0.15%
[29]	Alternate basis Return on Premium (i.e. pre-tax return from underwriting, including associated	O	(5.25/0)	(2.23/0)	(5.2576)	(3.2370)	(5.2570)	(2.23/0)	(5.2570)	(5.2570)	(5.25,0)	(5:2570)	(5.25/0/	(5.25/0)	(5.25/6
	investment income, as % of premium)	Exh H-1, row[21]	-	-	-	-	-	-	-	-	-	-	-	-	-
[30]	Alternate rate change basis (0.0% Cost of Capital, leverage 1.80)	=([14]+[16])/([15]-[27]-[18]-[19]-[28]-[29])-1	40.9%	40.9%	40.9%	40.9%	40.9%	29.6%	62.1%	-	(7.9%)	(10.2%)	(5.3%)	(11.3%)	39.4%
[31]	Avg WP @ Alternate rate change basis (0.0% Cost of Capital, leverage 1.80)	=[5]*(1+[30])	7,341	-	-	-	7,341	590	285	-	733	303	160	1,035	8,268
[32]	AWP dollar change for Alternate rate change basis (0.0% Cost of Capital, leverage 1.80)	-[21].[5]	2,131	_	_	_	2,131	135	109		(63)	(34)	(9)	(132)	2,337
[22]	nominal indemnity LR for Alternate rate change basis (0.0% Cost of Capital, leverage 1.80)	=[31]-[5]	2,131	-	-	-	2,131	135	109	_	(63)	(34)	'l (9)	(132)	2,337
[33]	nonlinear meetining are not Attended rate change basis (0.0% cost of Capital, leverage 1.80)	=[10]/(1+[30])	66.3%	66.3%	66.3%	66.3%	66.3%	67.9%	68.3%		66.6%	66.5%	66.6%	66.5%	66.4%
[34]	nominal excess legal LR for Alternate rate change basis (0.0% Cost of Capital, leverage 1.80)												"		
		=[13]*[33]	1.1%	1.1%	1.1%	1.1%	1.1%	-	-	-	-	-	-	-	0.9%
[35]	Rate change selected by FA	FA Assumptions except RoI; Alternate rate													
		change basis (0.0% Cost of Capital, leverage													
		1.80), Rol at 2.8% (NL PUB minimum)		30.7%	30.7%	30.7%	30.7%	22.8%	53.7%	-	(9.3%)	(11.8%)	(7.0%)	(12.7%)	29.7%
[36]	Avg WP @ Rate change selected by FA	=[5]*(1+[35])	5,210	-	-		6,809	559	271		722	297	157	1,019	7,693
[37]	AWP dollar change for Rate change selected by FA	=[36]-[5]	-	-	-	-	1,599	104	95	-	(74)	(40)	(12)	(148)	1,762
[38]	Annualized Prem chg for Rate change selected by FA	=[4]*[35]	1,250,415	-	-	-	1,250,415	69,794	74,107	-	(5,179)	(4,813)	(2,572)	(235)	1,381,517
[39]	nominal indemnity LR for Rate change selected by FA	=[10]/(1+[35])	93.4%	71.5%	71.5%	71.5%	71.5%	71.7%	72.0%	_	67.6%	67.7%	67.8%	67.6%	71.4%
[40]	nominal excess legal LR for Rate change selected by FA	=[13]*[39]	1.5%	1.1%	1.1%	1.1%	1.1%	-	-	_	_	- "		-	1.0%
[.0]	- · · · · · · · · · · · · · · · · · · ·	[] []	1.570	1.170	1.1/0	1.170	1.170								1.07

FA Indications - Page 5 of 34

Facility Association Residual Market (FARM)	experience	2006	-	2011	20.0%	RN eff date:		Trend Basis
Jurisidiction: Newfoundland & Labrador	accident yr	2007	-	2012	20.0%	Oct 1 2017	jurisdiction (short form): NL	type: FA Selected
Vehicle Type: Taxi	weights	2008	-	2013	20.0%		major rating class: PUB	market: INDUSTRY
Project ID: NL-2016Q4-TX	used in	2009	-	2014	20.0%	dcst rate:	minor rating class: TX	rating class: CV
Exh C-1	indications	2010	-	2015	20.0%	0.47%	rating type: all	as at: 31-Dec-15

Retroactive claims fee adjustment	72 month LR	ment rate LR	ment rate LR	minimum claims expense fee ratio	expense fee ratio		unadjusted experience claims expense fee ratio	experience claims expense fee ratio (post min/max)	Adjustment	discount by 1 yr	adjustment
	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[1]	[1]	[K]
[IBNR as % ultimate] as per Exh D-1: 0.7%	(see note 1)	Accounting & Statistical Manual (see note 2)	Statistical	Statistical	Statistical	Statistical	={co [F],	=row[41]:col [H] s.t. max / min, cols [D] & [E]		=1/(1+disc rate)	=[1]*[1]
[41] Retroactive claims fee adjustment at 12.0% ROE	58.7%	67.5%	10.0%	9.0%	16.0%	3.3%	9.1%	9.1%	(0.9%)	0.9953	(0.90%)
[42] Retroactive claims fee adjustment at Alternate Target	65.9%	67.5%	10.0%	9.0%	16.0%	3.3%	9.8%	9.8%	(0.2%)	0.9953	(0.20%)
[43] Retroactive claims fee adjustment on Selected Rate Change	70.9%	67.5%	10.0%	9.0%	16.0%	3.3%	10.3%	10.3%	0.3%	0.9953	0.30%

Goal seek to 0.0%, on col[8], row[20]

Exh C-1 Page 2 of 2

Notes:

[72mth LR] = Recorded Claims Ratio @ 72 months*(1-[IBNR as % ultimate])

2 See also Bulletin "All-Canada SC2004-02" issued on Jan. 7, 2004

excess legal as percent of TPL indemnity is AA Report = [ratio as % of total coverages EP] x [latest yr total coverages EP] / [latest yr TPL expected indemnity]

where ratio to EP from excess legal exhibit, and latest yr EP and TPL expected indemnity from a priori exhibit

				TPL				
2015 AA Rpt		Exh B.12.1		Exh B.8.6		Projected EP		Exh B.5.6.1
		pg 1 selected - cat I		prov, year		Adjustment		pg 1, col [5]
		excess ratio % total EP		2015 all coverage EP		2015 all coverage EP		2015 TPL expected indemnity
1.6%	=	1.32%	×	6.527.092	×	1.000	1	5.336.000

Jurisidiction: Newfoundland & Labrador Vehicle Type: Taxi

Exh C-2

Project ID: NL-2016Q4-TX

ite level factor exhibit

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all Exh C-2 Page 1 of 1

Derivation of Loss Ratios Underlying Current (i.e. "Expiring") Rates

Bas	sis: last submitted rate filing	Formulae	Third Party Liability	Bodily Injury	Property Damage	DCPD	TPL (indivisible)	Accident Benefits	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils	All Perils	TOTAL
	Distribution Used	Exh C-3 (option 1),	,												
[1]		row [6]	87.84%	-	-	_	87.84%	5.71%	3.65%	-	1.25%	0.80%	0.48%	0.27%	100.00%
[2]	Projected ultimate loss ratio (nominal), prior to rate adjustment	Exh C-3 (option 1),													
	,	row [10]	108.6%	108.60%	108.60%	108.60%	108.60%	118.30%	132.90%	-	57.70%	66.80%	70.60%	62.60%	108.8%
[3]	FA Written Rate Level Factor from last submitted filing	Prior Filing Exh C-2,													
	·	row [26]		2.2435	2.2435	2.2435	2.2435	8.3209	10.9405	1.0000	0.2104	0.2694	0.4548	0.230	
[4]	FA Written Rate Level Factor - current	=[26]		2.7954	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.1964	0.2712	0.4683	0.2210	
[5]	Estimated impact of subsequent rate changes	=[4]/[3]-1	24.6%	24.6%	24.6%	24.6%	24.6%	42.2%	50.9%	-	(6.7%)	0.7%	3.0%	(3.9%)	25.8%
[6]	Reform adjustment factors for changes not considered in prior analysis in its														
	projection to average accident date	as needed		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	
[7]	loss ratio (nominal) at current rates	=[2]*[6])/(1+[5])	87.2%	87.2%	87.2%	87.2%	87.2%	83.2%	88.1%	-	61.8%	66.3%	68.5%	65.1%	86.4%
	Modeled loss cost projected to average accident date, prior analysis														
[8]		Exh D-5a		-	-	-	872.61	28.30	8.13	0.68	258.13	179.72	64.58	231.99	
	Modeled loss cost projected to average accident date, current analysis														
[9]		Exh D-5a		-	-	-	900.11	28.30	8.78	0.68	258.13	179.72	64.58	231.99	
[10]	indemnity projection factor between average accident date underlying														
	current rates and future average accident date	=[9]/[8]	1.0320	1.0315	1.0315	1.0315	1.0315	1.0000	1.0800	1.0000	1.0000	1.0000	1.0000	1.0000	1.0310
[11]	annualized indemnity change	=[10]^(365/Exh B-1,													
		row [4])-1	3.2%	3.2%	3.2%	3.2%	3.2%	-	8.0%	-	-	-	-	-	3.1%
[12]	annualized premium trend factor	1+Exh D-4a, Total													
		Drift	1.0010	1.0010	1.0010	1.0010	1.0010	1.0000	1.0000	1.0000	1.0643	1.0608	1.0608	1.0643	1.0030
[13]	premium trend period in days (change in avg written date between rate														
	programs)	Exh B-1, row [2]	365	365	365	365	365	365	365	365	365	365	365	365	365
[14]	projected indemnity loss ratio (nominal) at current rates	=[7]*[10]/{[12]^([13]													
		/365)}	89.9%	89.9%	89.9%	89.9%	89.9%	83.2%	95.1%	-	58.1%	62.5%	64.6%	61.2%	88.9%

Most Current 12-Months Exposure and Premium														
(\$1s) unless otherwise indicated	Formulae	Third Party Liability	Bodily Injury	Property Damage	DCPD	TPL (indivisible)	Accident Benefits	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils	All Perils	TOTAL
FA Written Exposures, Rolling 12	FA AIX as at: Dec 31	2015												
[15]	20151	434	-	-	-	434	375	437	-	39	70	127	2	437
[16]	20152	348	-	-	-	348	298	347	(1)	31	51	91	-	348
[17]	TOTAL	782	-	-	-	782	673	784	(1)	70	121	217	2	784
FA Written Premium, Rolling 12	FA AIX as at: Dec 31	2015												
[18]	20151	1,201,609	-	-	-	1,201,609	28,566	9,161	-	41,417	22,263	14,769	2,198	1,319,983
[19]	20152	1,078,673	-	-	-	1,078,673	41,112	13,741	(25)	30,698	18,425	10,863	-	1,193,487
[20]	TOTAL	2,280,282	-	-	-	2,280,282	69,678	22,902	(25)	72,115	40,688	25,632	2,198	2,513,470
FA Average Written Premium, Rolling 12, \$s														
[21]	20151	2,771	-	-	-	2,771	76	21	-	1,064	319	117	1,388	3,019
[22]	20152	3,098	-	-	-	3,098	138	40	25	988	360	120	-	3,428
[23]	TOTAL	2,917	-	=	-	2,917	104	29	25	1,030	336	118	1,388	3,204

Most Current	12-Months Evnosure a	nd Dramium Ac	divisted to Curren	t Rate Level

(\$1s) unless otherwise indicated	•												2/3	3 CL, 1/3 CM	
FA Written Rate Level Factors															
[24]	20151			1.5000	1.5000	1.5000	1.5000	2.0000	2.0000	1.0000	0.3194	0.3267	0.3968	0.3220	
[25]	20152			1.6565	1.6565	1.6565	1.6565	3.5478	3.6365	1.0000	0.3013	0.3291	0.3945	0.3110	
[26]	last available mth:	31-Dec-19		2.7954	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.1964	0.2712	0.4683	0.2210	
FA Written Premium @ Current Rates, Rolling 12															
[27]	20151	=[18]*[26]/[24]	2,239,319	-	-	-	2,239,319	169,001	75,620	-	25,467	18,481	17,430	1,509	2,546,827
[28]	20152	=[19]*[26]/[25]	1,820,297	-	-	-	1,820,297	137,113	62,382	(25)	20,010	15,183	12,895	-	2,067,855
[29]	TOTAL		4,059,616	-	-	-	4,059,616	306,114	138,002	(25)	45,477	33,664	30,325	1,509	4,614,682
FA Average Written Premium @ Current Rates, Rolling 12, \$s															
[30]	20151		5,165	-	-	-	5,165	451	173	-	654	265	138	953	5,825
[31]	20152		5,228	-	-	-	5,228	459	180	25	644	296	142	-	5,939
[32]	TOTAL		5,193	-	-	-	5,193	455	176	25	650	278	139	953	5,883

Most Current 12-Months Exposure and Premium @ Current Rate Level, Projected to Future Avg Written Premium

(\$1s)	unless otherwise indicated														
[33]	Premium Trend Factors to 01-Apr-2018	AY 2015		1.0033	1.0033	1.0000	1.0033	1.0000	1.0000	1.0000	1.2245	1.2115	1.2115	1.2245	
[34]	FA Written Premium @ Current Rates, Projected to Future Period	=[29]*[33]	4,073,013	-	-	-	4,073,013	306,114	138,002	(25)	55,687	40,784	36,739	1,848	4,652,162
[35]	FA Avg Written Premium @ Current Rates, Projected to Future Period, \$s	=[34]/[17]	5,210	-	-	-	5,210	455	176	25	796	337	169	1,167	5,931

Exh C-3 (option 1)

DIRECT < COPY-PASTE VALUE > FROM Exh C-1 of last submitted rate filing Project ID: NL-2016Q1-TX

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all Exh C-3 (option 1) Page 1 of 2

..\..\proj 2016 Q1\01a indication (coverage)\01e NL 2016 Q1 TX indications - coverage v05.xlsx

Derivation	of Indicated Change in Overall Rate Level		[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[1]	[1]	[K]	[L]	[M]
(\$19	s) unless otherwise indicated		Third Party Liability	Bodily Injury	Property Damage	DCPD	TPL (indivisible)	Accident Benefits	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils	All Perils	TOTAL
Facility Assoc	iation Exposures & Premium	FA AIX as at: Dec 31 2014	LIAUTILY		Dalliage		(IIIdivisible)	belletits	Automobile	WIOTOTISE					
[1]	FA Written Exposures, Rolling 12	Exh C-2, row [17]	771				771	641	785	-	53	115	222	11	785
[2]	FA Written Premium, Rolling 12	Exh C-2, row [20]	2,171,672				2,171,672	51,049	17,011	-	61,208	34,085	24,873	13,452	2,373,350
[3]	FA Average Written Premium, Rolling 12, \$s	Exh C-2, row [23]	2,816				2,816	80	22	-	1,153	297	112	1,281	3,023
[4]	FA Written Premium @ Current Rates, Projected to Future Period	Exh C-2, row [34]	3,269,210				3,269,210	212,387	135,739	-	46,492	29,683	17,856	10,233	3,721,600
[5]	FA Avg Written Premium @ Current Rates, Projected to Future Period, \$s	Exh C-2, row [35]	4,239				4,239	332	173	-	876	258	81	975	4,740
[6]	Premium distribution @ current rates	([4] by coverage)/([4] total)	87.84%	-	-	-	87.84%	5.71%	3.65%	-	1.25%	0.80%	0.48%	0.27%	100.00%
Updated Proj	ected Loss Ratio (indemnity only, nominal) @ Current Rates	W 7-7													1
[7]	Updated projected loss ratio (indemnity only, nominal), prior analysis	Exh C-2, row [14]	101.7%	101.7%	101.7%	101.7%	101.7%	99.9%	92.5%		62.1%	67.9%	72.6%	64.7%	100.3%
Projected Los	s Ratio (indemnity only, nominal) based on FA experience														1
[8]	FA projected ultimate loss ratio (indemnity only, nominal)	Exh D-1, col [17]	116.1%	116.1%	116.1%	116.1%	116.1%	160.4%	429.0%	-	32.1%	61.3%	51.5%	24.4%	128.0%
Credibility-W	eighted Projected Loss Ratio (indemnity only, nominal)														1
[9]	FA experience credibility	Exh E-1, col [8]		48.1%	48.1%	48.1%	48.1%	30.4%	12.0%	-	14.6%	16.4%	9.6%	5.3%	1
[10]	Credibility-weighted projected Loss Ratio (indeminty only, nominal)	=[8]*[9]+[7]*(1-[9])	108.6%	108.6%	108.6%	108.6%	108.6%	118.3%	132.9%	-	57.7%	66.8%	70.6%	62.6%	108.8%
Projected Los	s Ratio (indemnity & excess legal, discounted @ 0.39%)														(
[11]	Loss discount factor	Exh F-2 (re-wghted)	0.9857	0.9857	0.9857	0.9857	0.9857	0.9901	0.9901	0.9846	0.9962	0.9955	0.9955	0.9962	0.9864
[12]	Credibility-weighted projected loss ratio (indemnity only, discounted)	=[10]*[11]	107.0%	107.0%	107.0%	107.0%	107.0%	117.1%	131.6%	-	57.5%	66.5%	70.3%	62.4%	107.2%
[13]	excess legal as % indemnity	see note 3 below	1.4%	1.4%	1.4%	1.4%	1.4%	-							1.2%
[14]	Cred-wght'd projected loss ratio (indemnity & excess legal, discounted)	=[12]*(1+[13])	108.5%	108.5%	108.5%	108.5%	108.5%	117.1%	131.6%	-	57.5%	66.5%	70.3%	62.4%	108.6%
Discounted R	evenue, Expenses and Capital Costs														ĺ
[15]	Revenue discount factor	Exh G-1, col[C], row[3]	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995
[16]	Total discounted fixed expenses, as % of current on-level premium	Exh G-1, col[C], row[30] for TPL, otherwise													l
		row[21]	3.21%	3.21%	3.21%	3.21%	3.21%	2.20%	2.20%	2.20%	2.20%	2.20%	2.20%	2.20%	3.09%
[17]	Discounted effective commission ratio (based on Indicated rate level change)	Exh G-1, col[C], row[5] Exh G-1, col[C], row[17] for TPL, otherswise	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
[18]	Total discounted variable expenses prem tax, S.C. non-claims fees, as % of premium	row[15]	14.20%	14.20%	14.20%	14.20%	14.20%	14.20%	14.20%	14.20%	14.20%	14.20%	14.20%	14.20%	14.20%
[19]	Discounted variable S.C. initial claims fee, as % of premium	Exh G-1, col[C], row[18]	9.96%	9.96%	9.96%	9.96%	9.96%	9.96%	9.96%	9.96%	9.96%	9.96%	9.96%	9.96%	9.96%
[20]	Retroactive claims fee adjustment (discounted), as % of premium @ target rate	goal seek to 0 on col [L], row 0.61	(0.62%)	(0.62%)	(0.62%)	(0.62%)	(0.62%)	(0.62%)	(0.62%)	(0.62%)	(0.62%)	(0.62%)	(0.62%)	(0.62%)	(0.62%)
[21]	Target Return on Premium (i.e. pre-tax return from underwriting, including associated investment				. 1				' '						
	income, as % of premium)	Exh H-1, row[15]	8.26%	8.26%	8.26%	8.26%	8.26%	8.26%	8.26%	8.26%	8.26%	8.26%	8.26%	8.26%	8.26%
Rate Indication															1
[22]	Indicated target rate change (12.0% ROE, leverage 2.0)	=([14]+[16])/([15]-[17]-[18]-[19]-[20]-[21])-1	79.7%	79.7%	79.7%	79.7%	79.7%	92.0%	115.3%	-	(3.9%)	10.5%	16.7%	3.9%	79.6%
[23]	Avg WP @ Indicated target rate change (12.0% ROE, leverage 2.0)	=[5]*(1+[22])	7,617	-	-	-	7,617	637	372	-	842	285	95	1,013	8,513
[24]	AWP dollar change for Indicated target rate change (12.0% ROE, leverage 2.0)	=[23]-[5]	3,378	-	-	-	3,378	305	199	-	(34)	27	14	38	3,773
[25]	nominal indemnity LR for Indicated target rate change (12.0% ROE, leverage 2.0)	=[10]/(1+[22])	60.4%	60.4%	60.4%	60.4%	60.4%	61.6%	61.7%	-	60.0%	60.5%	60.5%	60.3%	60.6%
[26]	nominal excess legal LR for Indicated target rate change (12.0% ROE, leverage 2.0)	=[13]*[25]	0.8%	0.8%	0.8%	0.8%	0.8%	-	-	-	-	-	-	-	0.7%
[27]	discounted commission as % of premium, based on alternate target	Exh G-1, col[C], row[6]	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
[28]	Retroactive claims fee adjustment (discounted), based on alternate target	goal seek to 0 on col [L], row 0.684	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
[29]	Alternate basis Return on Premium (i.e. pre-tax return from underwriting, including associated investment income, as % of premium)	Exh H-1, row[21]	_		_	_		_			_	_		_	1 -
[30]	Alternate rate change basis (0.0% Cost of Capital, leverage 1.81)	=([14]+[16])/([15]-[27]-[18]-[19]-[28]-[29])-1	60.3%	60.3%	60.3%	60.3%	60.3%	71.2%	92.0%		(14.3%)	(1.4%)	4.0%	(7.3%)	60.2%
[31]	Avg WP @ Alternate rate change basis (0.0% Cost of Capital, leverage 1.81)	=[5]*(1+[30])	6,795	-	-	-	6,795	568	332		751	254	84	904	7,593
[32]	AWP dollar change for Alternate rate change basis (0.0% Cost of Capital, leverage 1.81)		1 2,:33				5,33	200			.51		"		
[32]		=[31]-[5]	2,556	-	-	-	2,556	236	159	-	(125)	(4)	3	(71)	2,853
[33]	nominal indemnity LR for Alternate rate change basis (0.0% Cost of Capital, leverage 1.81)	-[10]//1.[20])	67.7%	67.7%	67.7%	67.7%	67.7%	69.1%	69.2%		67.3%	67.7%	67.9%	67.5%	67.9%
[34]	nominal excess legal LR for Alternate rate change basis (0.0% Cost of Capital, leverage 1.81)	=[10]/(1+[30])	07.7%	67.7%	07.7%	07.7%	07.7%	09.1%	09.2%	-	07.3%	07.7%	07.9%	07.5%	67.9%
[34]	nominal caces regardation rate mate rate change basis (0.0% Cost of Capital, reverage 1.81)	=[13]*[33]	0.9%	0.9%	0.9%	0.9%	0.9%	-	-		-	-	-	-	0.8%
[35]	Rate change selected by FA	Alternate rate change basis (0.0% Cost of													
		Capital, leverage 1.81), capped at +/-0.0% by	34.50	24.554	24.52	24.621	24.52	43.55			(0.400)	(2.00)	/4 22.	16.650	25
(25)	Aug IMD @ Pata shange colected by EA	coverage	24.6%	24.6%	24.6%	24.6%	24.6%	42.2%	50.9%	-	(9.4%)	(2.0%)	(1.3%)	(6.9%)	25.7%
[36]	Avg WP @ Rate change selected by FA	=[5]*(1+[35])	5,282	-	-	-	5,282	472	261	-	794	253	80	908	5,958
[37]	AWP dollar change for Rate change selected by FA	=[36]-[5]	1,043	- 07.20	- 07.20/	- 07.20/	1,043	140	88	-	(82)	(5)	(1)	(67)	1,218
[38]	nominal indemnity LR for Rate change selected by FA	=[10]/(1+[35])	87.2%	87.2%	87.2%	87.2%	87.2%	83.2%	88.1%	-	63.7%	68.2%	71.5%	67.2%	86.6%
[39]	nominal excess legal LR for Rate change selected by FA	=[13]*[38]	1.2%	1.2%	1.2%	1.2%	1.2%	-	-	-	-	-	-	-	1.0%

Exh C-3 (option 1)

n

jurisdiction (short form): NL major rating class: PUB minor rating class: TX

rating type: all

Exh C-3 (option 1) Page 2 of 2

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Project ID: NL-2016Q1-TX

..\..\proj 2016 Q1\01a indication (coverage)\01e NL 2016 Q1 TX indications - coverage v05.xlsx

Retroactive claims fee adjustment		ment rate LR	ment rate LR	expense fee ratio	ratio		expense fee ratio	claims expense fee ratio (post min/max)	Retroactive Adjustment	yr	discounted retroactive adjustment
	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[1]	[1]	[K]
[IBNR as % ultimate] as per Exh D-1: -0.7%	(see note 1)	Statistical	Statistical	Statistical	Accounting & Statistical Manual (see note 2)	Ctatistical	={co [F], row[40]}+[72	=row[40]:col [H] s.t. max / min, cols [D] & [E]	=[H]-[C]	=1/(1+disc rate)	=[1]*[1]
[40] Retroactive claims fee adjustment at 12.0% ROE	61.0%	67.5%	10.0%	9.0%	16.0%	3.3%	9.4%	9.4%	(0.6%)	0.9961	(0.60%)
[41] Retroactive claims fee adjustment at Alternate Target	68.4%	67.5%	10.0%	9.0%	16.0%	3.3%	10.1%	10.1%	0.1%	0.9961	0.10%
[42] Retroactive claims fee adjustment on Selected Rate Change	87.2%	67.5%	10.0%	9.0%	16.0%	3.3%	12.0%	12.0%	2.0%	0.9961	1.99%

Goal seek to 0.0%, on col[B], row[20]
[L]
0.02%
-

Notes:

[72mth LR] = Recorded Claims Ratio @ 72 months*(1-[IBNR as % ultimate])

1

² See also Bulletin "All-Canada SC2004-02" issued on Jan. 7, 2004

Project ID: NL-2016Q4-TX

FA Experience Projected Provincial Loss Ratio (Indemnity Only)

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

Exh D-1 Page 1 of 2

as at:	31-Dec-2015	115 FA Experience						Earne	d Premium O	n-Level		Ultimat	e Indemnity (On-Level					
		Earned								Earned	Rating	On-Level		Catastrophe	Other	Loss Cost	Trended	Trended	
Coverage	AY	Exposure	Earned	Avg Earned	Recorded	Loss Develop-	Ultimate	Ultimate Loss		Premium	Character-	Earned	Large Loss		Adjustments		Ultimate	Ultimate Loss	Accident
		(excl trailers)	Premium	Premium	Indemnity	ment Factor	Indemnity	Ratio	Costs	Rate On-	istic Drift	Premium	Load (%)	Load (%)	/ Loads (%)	Factor	Losses	Ratio	Year Weight
		(1-)	(¢4-)	(61-)	(61-)		(ć a -)		(61-)	Level Factor	Factor	(64-)					(61-)		
	-	(1s) [1]	(\$1s) [2]	(\$1s) [3]	(\$1s) [4]	[5]	(\$1s) [6]	[7]	(\$1s) [8]	[9]	[10]	(\$1s) [11]	[12]	[13]	[14]	[15]	(\$1s) [16]	[17]	[18]
		[1]	[2]	[3]	[4]	[5]	[O]	[7]	[6]	[2]	[10]	[11]	[12]	[13]	[14]	FA Selected		[1/]	[10]
						Exh D-2,										Trend	=[6]*(1+[12])		
		FA AIX	FA AIX	=[2]/[1]	FA AIX	Section C.	=[4]*[5]	=[6]/[2]	=[6]/[1]	Exh D-3a	Exh D-4a	=[2]*[9]*[10]	input	input	input	Models (Exh	*(1+[13])*(1+	=[16]/[11]	input
																D-5b)	[14])*[15]		
TOTAL																			
	2006	573	1,272,025	2,220	1,529,738		1,529,738	120.3%	2,669.70			3,682,630					2,441,545	66.3%	
	2007	663	1,290,663	1,947	2,217,261		2,408,159	186.6%	3,632.22			3,728,696					3,450,993	92.6%	
	2008	725	1,412,456	1,948	2,388,733		2,362,568	167.3%	3,258.71			4,100,527					3,307,574	80.7%	
	2009	764 780	1,516,679 1,565,401	1,985	2,520,358		2,520,358	166.2% 207.0%	3,298.90 4,153.76			4,378,900					3,469,884	79.2% 94.6%	
	2010 2011	780	1,587,985	2,007 2,003	3,216,086 3,594,184		3,239,929 3,602,098	207.0%	4,153.76			4,494,689 4,599,800					4,254,025 4,604,589	100.1%	20.0%
	2011	816	1,676,159	2,003	4,773,281		4,976,739	296.9%	6,098.94			4,822,335					5,925,230	122.9%	20.0%
	2013	852	1,857,181	2,180	3,333,181		3,464,015	186.5%	4,065.75			5,102,758					4,096,136	80.3%	20.0%
	2014	820	2,394,633	2,920	3,274,881		3,797,464	158.6%	4,631.05			4,934,485					4,415,301	89.5%	20.0%
	2015	795	2,441,126	3,071	3,193,478		4,496,330	184.2%	5,655.76			4,714,264					4,944,191	104.9%	20.0%
To	tal/Wtd Avg.	7,581	17,014,308	2,244	30,041,181		32,397,398	190.4%	4,273.50			44,559,084					40,909,468	99.5%	100.0%
TPL (indivisible)																			
TPL (indivis)	2006	573	1,172,997	2,047	1,280,890	1.0000	1,280,890	109.2%	2,235.41	2.7981	1.0123	3,322,534	-	-	-	1.4590	1,868,819	56.2%	-
	2007	663	1,188,137	1,792	2,109,375	1.0905	2,300,273	193.6%	3,469.49	2.7981	1.0113	3,362,093	-	-	-	1.4150	3,254,886	96.8%	-
	2008	725	1,301,390	1,795	2,230,303	0.9868	2,200,863	169.1%	3,035.67	2.7981	1.0103	3,678,926	-	-	-	1.3722	3,020,024	82.1%	-
	2009 2010	764 780	1,391,046 1,430,390	1,821 1,834	2,283,000 3,074,942	1.0000 1.0078	2,283,000 3,098,927	164.1% 216.6%	2,988.22 3,972.98	2.7981 2.7981	1.0093 1.0083	3,928,484 4,035,594	-	-	-	1.3307 1.2904	3,037,988 3,998,855	77.3% 99.1%	-
	2010	780	1,430,390	1,834	3,074,942	1.0078	3,098,927	214.8%	3,972.98	2.7981	1.0083	4,035,594		-	-	1.2513	3,998,855	99.1%	20.0%
	2011	816	1,532,990	1,879	4,124,378	1.0506	4,333,072	282.7%	5,310.14	2.7981	1.0063	4,316,483		_	-	1.2134	5,257,750	121.8%	20.0%
	2013	852	1,686,983	1,980	2,985,243	1.0345	3,088,234	183.1%	3,624.69	2.6725	1.0053	4,532,357		_	_	1.1765	3,633,307	80.2%	20.0%
	2014	820	2,185,608	2,665	2,659,061	1.2018	3,195,660	146.2%	3,897.15	1.9752	1.0043	4,335,576	_	-	-	1.1407	3,645,289	84.1%	20.0%
	2015	795	2,225,223	2,799	2,725,310	1.4115	3,846,775	172.9%	4,838.71	1.8495	1.0033	4,129,131	-	-	-	1.1060	4,254,533	103.0%	20.0%
To	tal/Wtd Avg.	7,581	15,577,116	2,055	26,603,723		28,768,935	184.7%	3,794.87			39,762,855					35,902,086	96.9%	100.0%
AccBen (indivisible																			
AccBen (indivis	2006	414	17,651	43	78,412		78,412	444.2%	189.40	11.8323	1.0000	208,852	-	-	-	1.8521	145,227	69.5%	-
	2007	457	18,274	40	42,457	1.0000	42,457	232.3%	92.90	11.8323	1.0000	216,223	-	-	-	1.8521	78,635	36.4%	-
	2008	519	22,140	43	120,873		120,873	545.9%	232.90	11.8323	1.0000	261,967	-	-	-	1.8521	223,869	85.5%	
	2009 2010	553 582	23,279 23,208	42 40	100,912 92,124		100,912 92,124	433.5% 396.9%	182.48 158.29	11.8323 11.8323	1.0000 1.0000	275,444 274,604	-	-	-	1.8521 1.8521	186,899 170,623	67.9% 62.1%	
	2010	611	23,208	40	247,283		250,226	1,030.7%	409.54	11.8323	1.0000	287,253		-		1.2988	324,994	113.1%	20.0%
	2012	639	25,385	40	539,836		534,600	2,106.0%	836.62	11.8323	1.0000	300,363		-	_	1.0000	534,600	178.0%	20.0%
	2013	693	30,167	44	134,188		156,222	517.9%	225.43	10.8196	1.0000	326,395	-	-	-	1.0000	156,222	47.9%	20.0%
	2014	682	49,100	72	126,606		110,084	224.2%	161.41	6.4530	1.0000	316,842	-	-	-	1.0000	110,084	34.7%	20.0%
	2015	675	55,589	82	227,032	1.6009	363,456	653.8%	538.45	5.5637	1.0000	309,281	-	-	-	1.0000	363,456	117.5%	20.0%
	tal/Wtd Avg.	5,825	289,070	50	1,709,723		1,849,366	639.8%	317.49			2,777,224					2,294,609	98.2%	100.0%
Uninsured Autom																			
UA	2006	570	4,027	7	160,134		160,134	3,976.5%	280.94	16.5092	1.0000	66,483		-	-	2.6053	417,197	627.5%	-
	2007 2008	662 719	4,050 4,667	6	37,028		37,028	914.3%	55.93	16.5092 16.5092	1.0000	66,862	-	=	-	2.4055	89,071	133.2%	
	2008	719	4,667 5,162	6 7	15,326 102,310		18,601 102,310	398.6% 1,982.0%	25.87 134.97	16.5092	1.0000 1.0000	77,048 85,220	1	-	-	2.2284 2.0610	41,450 210,861	53.8% 247.4%	
	2009	758	5,162	7	39,573		39,431	748.8%	50.81	16.5092	1.0000	85,220	1 .	-	-	1.9046	75,100	86.4%	
	2011	793	5,362	7	186,322		181,273	3,380.7%	228.59	16.5092	1.0000	88,522		-	_	1.7631	319,602	361.0%	20.0%
	2012	816	5,532	7	37,865		37,865	684.5%	46.40	16.5092	1.0000	91,329	_	=	-	1.6289	61,678	67.5%	20.0%
	2013	854	7,749	9	167,722		172,032	2,220.1%	201.44	15.0962	1.0000	116,980	-	-	-	1.5060	259,080	221.5%	20.0%
	2014	826	16,178	20	424,744	1.0059	427,250	2,640.9%	517.25	9.0037	1.0000	145,662	.	-	-	1.3937	595,458	408.8%	20.0%
	2015	804	18,197	23	115,489	1.2003	138,621	761.8%	172.41	7.7366	1.0000	140,783		-	-	1.2893	178,724	126.9%	20.0%
To	tal/Wtd Avg.	7,578	76,190	10	1,286,513		1,314,545	1,725.4%	173.47	1		965,826					2,248,221	237.1%	100.0%

Project ID: NL-2016Q4-TX

FA Experience Projected Provincial Loss Ratio (Indemnity Only)

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

Exh D-1 Page 2 of 2

as at:	: 31-Dec-2015				FA Exp	erience				Earne	d Premium O	n-Level		Ultima	te Indemnity O	n-Level			
Coverage	AY	Earned Exposure (excl trailers)	Earned Premium	Avg Earned Premium	Recorded Indemnity	Loss Develop- ment Factor	Ultimate Indemnity	Ultimate Loss Ratio	Ultimate Loss Costs	Earned Premium Rate On- Level Factor	Rating Character- istic Drift Factor	On-Level Earned Premium	Large Loss Load (%)	Catastrophe Adjustment Load (%)	Other Adjustments / Loads (%)	Loss Cost Projection Factor	Trended Ultimate Losses	Trended Ultimate Loss Ratio	Accident Year Weight
		(1s)	(\$1s)	(\$1s)	(\$1s)		(\$1s)		(\$1s)			(\$1s)					(\$1s)		
		[1]	[2]	[3]	[4]	[5] Exh D-2,	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15] FA Selected Trend	[16] =[6]*(1+[12])	[17]	[18]
0.11:		FA AIX	FA AIX	=[2]/[1]	FA AIX	Section C.	=[4]*[5]	=[6]/[2]	=[6]/[1]	Exh D-3a	Exh D-4a	=[2]*[9]*[10]	input	input	input	Models (Exh D-5b)	*(1+[13])*(1+ [14])*[15]	=[16]/[11]	input
Collision CL	2006	27	31,499	1,167	4,282	1.0000	4,282	13.6%	158.59	0.5095	2.1455	34,433		_	_	1.0000	4,282	12.4%	_
O.E	2007	24	29,936	1,247	9,821	1.0000	9,821	32.8%	409.21	0.5141	2.0159	31,025	_	_	_	1.0000	9,821	31.7%	-
	2008	27	35,099	1,300	11,450	1.0000	11,450	32.6%	424.07	0.5141	1.8941	34,178	-	=	-	1.0000	11,450	33.5%	-
	2009	21	32,294	1,538	1,870	1.0000	1,870	5.8%	89.05	0.5141	1.7800	29,552	-	-	-	1.0000	1,870	6.3%	-
	2010	28	39,255	1,402	-	1.0000	-	-	-	0.5270	1.6722	34,593	-	-	-	1.0000	-	-	-
	2011	36	43,999	1,222	11,380	1.0000	11,380	25.9%	316.11	0.5845	1.5711	40,405	-	-	-	1.0000	11,380	28.2%	20.0%
	2012	46	57,659	1,253	4,810		4,810		104.57	0.5916	1.4762	50,355	-	-	-	1.0000	4,810	9.6%	20.0%
	2013	49	60,424	1,233	16,908	0.9868	16,685	27.6%	340.51	0.5916	1.3873	49,592	-	-	-	1.0000	16,685	33.6%	20.0%
	2014	51	65,370	1,282	29,723	1.0000	29,723	45.5%	582.80	0.6170	1.3032	52,562	-	-	-	1.0000	29,723	56.5%	20.0%
-	2015	64	68,991	1,078	110,888	1.1538	127,943	185.4%	1,999.11	0.6213	1.2245	52,487 409,182	<u> </u>			1.0000	127,943	243.8%	20.0%
Comp	Total/Wtd Avg.	373	464,526	1,245	201,132		217,964	46.9%	584.35			409,182	-				217,964	74.3%	100.0%
CM	2006	51	15,158	297	301	1.0000	301	2.0%	5.90	0.5773	2.0607	18,033		_	_	1.0000	301	1.7%	.
C.V.	2007	49	16,229	331	2,312	1.0000	2,312		47.18	0.5826	1.9426	18,367	_	_	_	1.0000	2,312	12.6%	.
	2008	46	16,090	350	2,086	1.0000	2,086		45.35	0.5826	1.8312	17,166		=	-	1.0000	2,086	12.2%	
	2009	52	21,392	411	17,353	1.0000	17,353	81.1%	333.71	0.5826	1.7266	21,519	-	-	-	1.0000	17,353	80.6%	-
	2010	62	24,008	387	2,052	1.0000	2,052	8.5%	33.10	0.6169	1.6273	24,101	-	=	-	1.0000	2,052	8.5%	-
	2011	67	19,150	286	1,866	1.0000	1,866		27.85	0.8024	1.5341	23,573	-	-	-	1.0000	1,866	7.9%	20.0%
	2012	79	22,343	283	34,001	1.0000	34,001	152.2%	430.39	0.8299	1.4461	26,814	-	-	-	1.0000	34,001	126.8%	20.0%
	2013	100	28,908	289	8,085	1.0000	8,085	28.0%	80.85	0.8299	1.3635	32,711	-	-	-	1.0000	8,085	24.7%	20.0%
	2014	115	33,299	290	25,924	1.0000	25,924	77.9%	225.43	0.8596	1.2851	36,784	-	-	-	1.0000	25,924	70.5%	20.0%
	Z015 Total/Wtd Avg.	127 748	40,213 236,790	317 317	1,382 95,362	0.9419	1,302 95,282	3.2% 40.2%	10.25 127.38	0.8368	1.2115	40,767 259,835		-	-	1.0000	1,302 95,282	3.2% 46.6%	20.0%
Specified Perils		746	230,790	31/	95,562		93,262	40.2%	127.56			259,655					95,262	40.0%	100.0%
SP SP	2006	164	29,892	182	5,719	1.0000	5,719	19.1%	34.87	0.5094	2.0607	31,378		_	_	1.0000	5,719	18.2%	_
31	2007	224	32,516	145	10,786	1.0000	10,786		48.15	0.5141	1.9426	32,473	_	_	_	1.0000	10,786	33.2%	.
	2008	219	31,706	145	8,695	1.0000	8,695	27.4%	39.70	0.5141	1.8312	29,849	_	_	_	1.0000	8,695	29.1%	-
	2009	254	42,622	168	14,913	1.0000	14,913	35.0%	58.71	0.5141	1.7266	37,833	-	-	-	1.0000	14,913	39.4%	-
	2010	249	41,744	168	7,395	1.0000	7,395	17.7%	29.70	0.5510	1.6273	37,429	-	-	-	1.0000	7,395	19.8%	-
	2011	241	30,887	128	16,112	1.0000	16,112	52.2%	66.85	0.7672	1.5341	36,353	-	-	-	1.0000	16,112	44.3%	20.0%
	2012	235	29,843	127	32,391	1.0000	32,391	108.5%	137.83	0.8020	1.4461	34,611	-	-	-	1.0000	32,391	93.6%	20.0%
	2013	231	29,306	127	15,038	1.1145	16,760	57.2%	72.55	0.8020	1.3635	32,047	-	-	-	1.0000	16,760	52.3%	20.0%
	2014	220	27,075	123		1.5941	-		-	0.8824	1.2851	30,702	-	-	-	1.0000			20.0%
	2015	227	25,640	113	13,377	1.3630	18,233		80.32	1.1475	1.2115	35,645	-	-	-	1.0000	18,233	51.2%	20.0%
	Total/Wtd Avg.	2,264	321,231	142	124,426		131,004	40.8%	57.86			338,320					131,004	48.3%	100.0%

Val Business Segment: non-PPV

622,270

242,256

214,808

811,412

37,865

183,722

472,494

184,292

1,000

5,000

10,000

19,000

176,944

176,134

125,130

278,013

134,406

70,920

81,905

125,929

139,454

68,131

59,028

105,681

50,445

37,462

21,534

494,385

Facility Association Residual Market (FARM)
Jurisidiction: Newfoundland & Labrador
Vehicle Type: Taxi
Project ID: NL-2016Q4-TX

2012

2013

2014

2015

5,922,857

3,416,864

4,034,933

4,838,060

616,406

515,622

748,214

857,431

C. Implied Loss Development Factor

Val Market: FARM

6,539,263

3,932,486

4,783,147

5,695,491

Loss Development Factors

Exh D-2

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all Exh D-2 Page 1 of 1

as at:	30-Jun-2016	A. Selected Ultir	nate Indemnity	by Minor Cov	verage Type												
	Accident Year	Bodily Injury	Property Damage	DCPD	TPL (indivisible)	Medical Expenses	Disability Income	Death Benefits	Funeral Expenses	Supp. AccBen	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils	All Perils
		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]
		2016 Q2	2016 Q2	2016 Q2		2016 Q2	2016 Q2	2016 Q2	2016 Q2	2016 Q2	2016 Q2	2016 Q2	2016 Q2	2016 Q2	2016 Q2	2016 Q2	2016 Q2
	(\$1s)	FARM	FARM	FARM	=sum([1]to[3])	FARM	FARM	FARM	FARM	FARM	FARM	FARM	FARM	FARM	FARM	FARM	FARM
		valuation	valuation	valuation		valuation	valuation	valuation	valuation	valuation	valuation	valuation	valuation	valuation	valuation	valuation	valuation
	2006	1,499,055	391,038	-	1,890,093						135,493	160,134	-	52,425	126,062	107,028	86,489
	2007	3,336,883	501,261	-	3,838,144						100,304	39,019	-	86,000	83,114	80,996	89,814
	2008	2,812,640	371,054	-	3,183,694						161,065	49,800	-	100,812	20,439	32,767	46,266
	2009	2,531,941	464,019	-	2,995,960						163,932	102,310	-	65,577	96,295	29,002	18,724
	2010	3,651,484	459,985	-	4,111,469						323,108	237,097	500,150	36,290	7,541	37,965	69,890
	2011	3,874,237	739,195	-	4,613,432						321,775	241,543	-	52,393	289,554	149,787	35,728

Val Jurisdiction: NL

diagonal:	31-Dec-2015	B. Recorded Ind	lemnity by Min	or Coverage Ty	pe												
	Accident Year	Bodily Injury	Property Damage	DCPD	TPL (indivisible)	Medical Expenses	Disability Income	Death Benefits	Funeral Expenses	Supp. AccBen	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils	All Perils
٠.	<u> </u>	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	[32]
	(\$1s)	2015 Q4	2015 Q4	2015 Q4	=sum([17]to	2015 Q4	2015 Q4	2015 Q4	2015 Q4	2015 Q4	2015 Q4	2015 Q4	2015 Q4	2015 Q4	2015 Q4	2015 Q4	2015 Q4
	(\$12)	FARM Data	FARM Data	FARM Data	[19])	FARM Data	FARM Data	FARM Data	FARM Data	FARM Data	FARM Data	FARM Data	FARM Data	FARM Data	FARM Data	FARM Data	FARM Data
	2006	1,499,055	391,038	-	1,890,093	93,279	42,214	-	-	-	135,493	160,134	-	52,425	126,062	107,028	86,489
	2007	3,018,330	501,261	-	3,519,591	59,929	37,375	2,000	1,000	-	100,304	39,019	-	86,000	83,114	80,996	89,814
	2008	2,855,312	371,054	-	3,226,366	127,209	32,856	-	1,000	-	161,065	41,032	14,000	100,812	20,439	32,767	46,266
	2009	2,531,941	464,019	-	2,995,960	119,184	44,748	-	-	-	163,932	102,310	-	65,577	96,295	29,002	18,724
	2010	3,619,834	459,985	-	4,079,819	135,990	173,118	13,000	1,000	-	323,108	237,955	500,150	36,290	7,541	37,965	69,890
	2011	3,859,524	739,195	-	4,598,719	203,518	113,471	-	1,000	-	317,989	248,279	-	52,393	289,554	149,787	35,728
	2012	5,602,103	622,054	-	6,224,157	201,403	426,984	-	-	-	628,387	37,865	-	176,944	134,406	139,454	50,445
	2013	3,275,842	525,622	-	3,801,464	164,042	33,042	10,000	1,000	-	208,084	179,122	-	178,484	70,920	61,131	37,462
	2014	3,236,684	743,406	-	3,980,090	149,167	95,871	-	2,000	-	247,038	469,744	-	125,130	81,905	37,028	21,534
	2015	3.252.141	783.005	-	4.035.146	445.312	60.541	-	1.000	-	506.853	153.534	-	240.953	133.693	77.536	531.139

Accident Year	Bodily Injury	Property	DCPD	TPL	Medical	Disability	Death Benefits	Funeral	Supp. AccBen	AccBen	Uninsured	Underinsured	Collision	Comp	Specified	All Perils
Accident real	Bodily Ilijuly	Damage	DCFD	(indivisible)	Expenses	Income	Death benefits	Expenses	эцрр. Ассьен	(indivisible)	Automobile	Motorist	Comsion	Comp	Perils	All Fellis
	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	[47]	[48]
	=if(or([5]=0,[1 :	if(or([5]=0,[1	=if(or([5]=0,[1		=if(or([5]=0,[2	=if(or([5]=0,[2	=if(or([5]=0,[2	=if(or([5]=0,[2	=if(or([5]=0,[2		-:f/[27]-0 [42]	=if([28]=0,[33],				
	7]=0),[36],[1]/[8	3]=0),[36],[2]/[9]=0),[36],[3]/[=[4]/[20]	1]=0),[42],[5]/[2]=0),[42],[6]/	3]=0),[42],[7]/[4]=0),[42],[8]/	5]=0),[42],[9]/[=[10]/[26]	[11]/[27])	[12]/[28])	=[13]/[29]	=[14]/[30]	=[15]/[31]	=[16]/[32]
	17])	18])	19])		21])	22])	23])	24])	25])		[11]/[2/])	[12]/[20])				
2006	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2007	1.1055	1.0000	1.0905	1.0905	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.1055	1.0000	1.0000	1.0000	1.0000
2008	0.9851	1.0000	0.9868	0.9868	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.2137	-	1.0000	1.0000	1.0000	1.0000
2009	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2010	1.0087	1.0000	1.0078	1.0078	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9964	1.0000	1.0000	1.0000	1.0000	1.0000
2011	1.0038	1.0000	1.0032	1.0032	1.0119	1.0119	1.0119	1.0119	1.0119	1.0119	0.9729	1.0038	1.0000	1.0000	1.0000	1.0000
2012	1.0573	0.9909	1.0506	1.0506	0.9903	0.9903	0.9903	0.9903	0.9903	0.9903	1.0000	1.0573	1.0000	1.0000	1.0000	1.0000
2013	1.0430	0.9810	1.0345	1.0345	1.1642	1.1642	1.1642	1.1642	1.1642	1.1642	1.0257	1.0430	0.9868	1.0000	1.1145	1.0000
2014	1.2466	1.0065	1.2018	1.2018	0.8695	0.8695	0.8695	0.8695	0.8695	0.8695	1.0059	1.2466	1.0000	1.0000	1.5941	1.0000
2015	1.4877	1.0951	1.4115	1.4115	1.6009	1.6009	1.6009	1.6009	1.6009	1.6009	1.2003	1.4877	1.1538	0.9419	1.3630	0.9308

27,075

25,640

25,640

25,640

25,640

25,640

Facility Association Residual Market (FARM) Jurisidiction: Newfoundland & Labrador

Vehicle Type: Taxi Project ID: NL-2016Q4-TX

Exh D-3a

Accident Year

2014

2015

2016

2017

2018

2019

Summary - Earned Premium On-level Factors

as at: 31-Dec-2015 (\$1s) uı

unless otherwis	e indicated							
Bodily Injury	Property	DCPD	AccBen	Uninsured	Underinsured	Collision	Comp	Specified
Boully Illjuly	Damage	DCPD	(indivisible)	Automobile	Motorist	Collision	Comp	Perils
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX
data	data	data	data	data	data	data	data	data
-	-	-	17,651	4,027	-	31,499	15,158	29,892
-	-	-	18,274	4,050	-	29,936	16,229	32,516
-	-	-	22,140	4,667	-	35,099	16,090	31,706
-	-	-	23,279	5,162	-	32,294	21,392	42,622
-	-	-	23,208	5,266	-	39,255	24,008	41,744
-	-	-	24,277	5,362	-	43,999	19,150	30,887
-	-	-	25,385	5,532	-	57,659	22,343	29,843
-	-	-	30,167	7,749	-	60,424	28,908	29,306

16,178

18,197

18,197

18,197

18,197

18,197

65,370

68,991

68,991

68,991

68,991

68,991

(1)

(1)

(1)

33,299

40,213

40,213

40,213

40,213

40,213

TPL (indivisible)	Medical Expenses	Disability Income	Death Benefits	Funeral Expenses	Supp. AccBen	All Perils	Total
[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]
FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	=sum([1] to
data	data	data	data	data	data	data	[16])
1,172,997	-	-	-	-	-	801	1,272,025
1,188,137	-	-	-	-	-	1,521	1,290,663
1,301,390	-	-	-	-	-	1,364	1,412,456
1,391,046	-	-	-	-	-	884	1,516,679
1,430,390	-	-	-	-	-	1,530	1,565,401
1,462,352	-	-	-	-	-	1,958	1,587,985
1,532,990	-	-	-	-	-	2,407	1,676,159
1,686,983	-	-	-	-	-	13,644	1,857,181
2,185,608	-	-	-	-	-	18,003	2,394,633
2,225,223	-	-	-	-	-	7,274	2,441,126
2,225,223	-	-	-	-	-	7,274	2,441,126
2,225,223	-	-	-	-	-	7,274	2,441,126
2,225,223	-	-	-	-	-	7,274	2,441,126
2,225,223	-	-	-	-	-	7,274	2,441,126

jurisdiction (short form): NL

major rating class: PUB

minor rating class: TX

rating type: all

Earned Rate Indices - 12 month policies

Accident Year	Bodily Injury	Property Damage	DCPD	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils
	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]
	Rate Level Exhibit	Rate Level Exhibit	Rate Level Exhibit	Rate Level Exhibit	Rate Level Exhibit	Rate Level Exhibit	Rate Level Exhibit	Rate Level Exhibit	Rate Level Exhibit
2006	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3855	0.4698	0.9194
2007	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3820	0.4655	0.9110
2008	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3820	0.4655	0.9110
2009	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3820	0.4655	0.9110
2010	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3727	0.4396	0.8499
2011	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3360	0.3380	0.6104
2012	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3320	0.3268	0.5839
2013	1.0468	1.0468	1.0468	1.0936	1.0936	1.0000	0.3320	0.3268	0.5839
2014	1.4168	1.4168	1.4168	1.8336	1.8336	1.0000	0.3183	0.3155	0.5307
2015	1.5128	1.5128	1.5128	2.1267	2.1339	1.0000	0.3161	0.3241	0.4081
2016	1.7863	1.7863	1.7863	4.6383	5.2123	1.0000	0.2820	0.3181	0.4015
2017	2.4037	2.4037	2.4037	9.2799	12.4361	1.0000	0.2140	0.2775	0.4585
2018	2.7877	2.7877	2.7877	11.7831	16.4312	1.0000	0.1967	0.2713	0.4684
2019	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.1964	0.2712	0.4683

49,100

55,589

55,589

55,589

55,589

55,589

TPL (indivisible)	Medical Expenses	Disability Income	Death Benefits	Funeral Expenses	Supp. AccBen	All Perils	Total
[26]	[27]	[28]	[29]	[30]	[31]	[32]	[33]
=prior AY Index *(1+[42] AY chg)	=[20]	=[20]	=[20]	=[20]	=[20]	=2/3*[23] +1/3*[24]	=average([25] to)
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.4140	0.9762
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.4100	0.9760
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.4100	0.9760
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.4100	0.9765
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3950	0.9711
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3370	0.9652
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3300	0.9597
1.0470	1.0936	1.0936	1.0936	1.0936	1.0936	0.3300	1.0009
1.4166	1.8336	1.8336	1.8336	1.8336	1.8336	0.3170	1.3644
1.5129	2.1267	2.1267	2.1267	2.1267	2.1267	0.3190	1.4629
1.7867	4.6383	4.6383	4.6383	4.6383	4.6383	0.2940	1.7915
2.4049	9.2799	9.2799	9.2799	9.2799	9.2799	0.2350	2.5124
2.7897	11.7831	11.7831	11.7831	11.7831	11.7831	0.2220	2.9494
2.7981	11.8323	11.8323	11.8323	11.8323	11.8323	0.2210	2.9587

as per file on Oct 31, 2016

Exh D-3a Page 1 of 2 Facility Association Residual Market (FARM) Jurisidiction: Newfoundland & Labrador

Vehicle Type: Taxi Project ID: NL-2016Q4-TX

Exh D-3a

Summary - Earned Premium On-level Factors

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

Exh D-3a Page 2 of 2

Accident Year	Bodily Injury	Property Damage	DCPD	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils
	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]
	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level
	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit
2006									
2007	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(0.9%)	(0.9%)	(0.9%
2008	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2009	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2010	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(2.4%)	(5.6%)	(6.7%
2011	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(9.8%)	(23.1%)	(28.2%
2012	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(1.2%)	(3.3%)	(4.3%
2013	4.7%	4.7%	4.7%	9.4%	9.4%	0.0%	0.0%	0.0%	0.0%
2014	35.3%	35.3%	35.3%	67.7%	67.7%	0.0%	(4.1%)	(3.5%)	(9.1%
2015	6.8%	6.8%	6.8%	16.0%	16.4%	0.0%	(0.7%)	2.7%	(23.1%
2016	18.1%	18.1%	18.1%	118.1%	144.3%	0.0%	(10.8%)	(1.9%)	(1.6%
2017	34.6%	34.6%	34.6%	100.1%	138.6%	0.0%	(24.1%)	(12.8%)	14.2%
2018	16.0%	16.0%	16.0%	27.0%	32.1%	0.0%	(8.1%)	(2.2%)	2.2%
2019	0.3%	0.3%	0.3%	0.4%	0.5%	0.0%	(0.2%)	0.0%	0.0%

TPL	Medical	Disability	Death Benefits	Funeral	Supp. AccBen	All Perils
(indivisible)	Expenses	Income	Death benefits	Expenses	эцрр. Ассьен	All Fellis
[42]	[43]	[44]	[45]	[46]	[47]	[48]
=average([41]	-[26]	-[26]	-[36]	-[36]	-[36]	=average([39]
to [35])	=[36]	=[36]	=[36]	=[36]	=[36]	to [40]
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(0.9%)
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(4.0%)
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(16.5%)
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(2.3%)
4.7%	9.4%	9.4%	9.4%	9.4%	9.4%	0.0%
35.3%	67.7%	67.7%	67.7%	67.7%	67.7%	(3.8%)
6.8%	16.0%	16.0%	16.0%	16.0%	16.0%	1.0%
18.1%	118.1%	118.1%	118.1%	118.1%	118.1%	(6.4%)
34.6%	100.1%	100.1%	100.1%	100.1%	100.1%	(18.5%)
16.0%	27.0%	27.0%	27.0%	27.0%	27.0%	(5.2%)
0.3%	0.4%	0.4%	0.4%	0.4%	0.4%	(0.1%)

Earned Rate Change [34] 9] = col[33], % AY chg %) (0.1%) % 0.0% % 0.0% % (0.3%) %) (1.1%) %) (0.2%) % 4.5% %) 33.8% % 6.5% %) 19.9% %) 34.1% %) 34.1% %) 0.3%		
[34] = col[33], % AY chg %) (0.1%) % 0.0% % 0.0% %) (0.3%) %) (1.1%) %) (0.2%) % 4.5% %) 33.8% % 6.5% %) 19.9% %) 34.1% %) 34.1%		Earned Rate
9] = col[33], % AY chg (0.1%) % 0.0% % 0.0% % (0.3%) (1.1%) %) (0.2%) % 4.5% % 6.5% % 6.5% 19.9% % 34.1% %) 34.1% %)		Change
chg (0.1%) % 0.0% % 0.0% % 0.0% % (0.3%) %) (1.1%) % 4.5% % 4.5% % 19.9% % 19.9% % 34.1% %) 34.1% %)		[34]
%) (0.1%) % 0.0% % 0.0% %) (0.3%) %) (1.1%) %) (0.2%) % 4.5% %) 33.8% % 6.5% %) 34.1% %) 34.1% %) 15.2%	9]	= col[33], % AY
% 0.0% 0.0% 0.0% (0.3%) (0.3%) (1.1%) (0.2%) (4.5% 4.5% 6.5% (19.9% 33.4% 6.5% (4.5% 34.1% 15.2% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% 34.1% (4.5% 34.1% 34.1% 34.1% (4.5% 34.1% 34.1% 34.1% (4.5% 34.1% 34.1% 34.1% 34.1% (4.5% 34.1% 34.1% 34.1% 34.1% (4.5% 34.1% 34.1% 34.1% 34.1% (4.5% 34.1% 34.1% 34.1% 34.1% (4.5% 34.1% 34.1% 34.1% 34.1% (4.5% 34.1% 34.1% 34.1% 34.1% 34.1% (4.5% 34.1% 34.1% 34.1% 34.1% 34.1% (4.5% 34.1%		chg
% 0.0% 0.0% 0.0% (0.3%) (0.3%) (1.1%) (0.2%) (4.5% 4.5% 6.5% (19.9% 33.4% 6.5% (4.5% 34.1% 15.2% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% (4.5% 34.1% 34.1% 34.1% (4.5% 34.1% 34.1% 34.1% (4.5% 34.1% 34.1% 34.1% (4.5% 34.1% 34.1% 34.1% 34.1% (4.5% 34.1% 34.1% 34.1% 34.1% (4.5% 34.1% 34.1% 34.1% 34.1% (4.5% 34.1% 34.1% 34.1% 34.1% (4.5% 34.1% 34.1% 34.1% 34.1% (4.5% 34.1% 34.1% 34.1% 34.1% 34.1% (4.5% 34.1% 34.1% 34.1% 34.1% 34.1% (4.5% 34.1%		
% 0.0% (0.3%) (0.3%) (1.1%) (0.2%) (0.2%) % 4.5% (0.38%) (0.2%) 4.5% (0.2%) 33.8% (0.5%) 19.9% (0.3%) 34.1% (0.3%) 15.2%	%)	(0.1%)
%) (0.3%) %) (1.1%) %) (0.2%) % 4.5% %) 33.8% % 6.5% %) 19.9% %) 34.1% %) 34.1%	%	0.0%
%) (1.1%) %) (0.2%) % 4.5% %) 33.8% % 6.5% %) 19.9% %) 34.1% %) 15.2%	%	0.0%
%) (0.2%) % 4.5% %) 33.8% % 6.5% %) 19.9% %) 34.1% %) 15.2%	%)	(0.3%)
% 4.5% %) 33.8% % 6.5% %) 19.9% %) 34.1% %) 15.2%	%)	(1.1%)
%) 33.8% % 6.5% %) 19.9% %) 34.1% %) 15.2%	%)	(0.2%)
% 6.5% %) 19.9% %) 34.1% %) 15.2%	%	4.5%
%) 19.9% %) 34.1% %) 15.2%	%)	33.8%
%) 34.1% %) 15.2%	%	6.5%
%) 15.2%	%)	19.9%
· 1	%)	34.1%
%) 0.3%	%)	15.2%
	%)	0.3%

Earned Premium Rate On-Level Factor to 2019

Accident Year	Bodily Injury	Property Damage	DCPD	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils
	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]
	=[17], [AY	=[18], [AY	=[19], [AY	=[20], [AY	=[21], [AY	=[22], [AY	=[23], [AY	=[24], [AY	=[25], [AY
	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY
2006	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5095	0.5773	0.509
2007	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5141	0.5826	0.514
2008	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5141	0.5826	0.514
2009	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5141	0.5826	0.514
2010	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5270	0.6169	0.551
2011	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5845	0.8024	0.767
2012	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5916	0.8299	0.802
2013	2.6704	2.6704	2.6704	10.8196	15.0962	1.0000	0.5916	0.8299	0.802
2014	1.9730	1.9730	1.9730	6.4530	9.0037	1.0000	0.6170	0.8596	0.882
2015	1.8478	1.8478	1.8478	5.5637	7.7366	1.0000	0.6213	0.8368	1.147
2016	1.5649	1.5649	1.5649	2.5510	3.1674	1.0000	0.6965	0.8526	1.166
2017	1.1630	1.1630	1.1630	1.2750	1.3275	1.0000	0.9178	0.9773	1.021
2018	1.0028	1.0028	1.0028	1.0042	1.0047	1.0000	0.9985	0.9996	0.999
2019	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000

TPL	Medical	Disability	Death Benefits	Funeral	Supp. AccBen	All Perils	Total
(indivisible)	Expenses	Income	Death Benefits	Expenses	Supp. Acciden	All Perils	TOTAL
[42]	[43]	[44]	[45]	[46]	[47]	[48]	[49]
=[26], [AY	=[27], [AY	=[28], [AY	=[29], [AY	=[30], [AY	=[31], [AY	=[32], [AY	=[33], [AY
2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY
2.7981	11.8323	11.8323	11.8323	11.8323	11.8323	0.5338	3.0308
2.7981	11.8323	11.8323	11.8323	11.8323	11.8323	0.5390	3.0315
2.7981	11.8323	11.8323	11.8323	11.8323	11.8323	0.5390	3.0315
2.7981	11.8323	11.8323	11.8323	11.8323	11.8323	0.5390	3.0299
2.7981	11.8323	11.8323	11.8323	11.8323	11.8323	0.5595	3.0468
2.7981	11.8323	11.8323	11.8323	11.8323	11.8323	0.6558	3.0654
2.7981	11.8323	11.8323	11.8323	11.8323	11.8323	0.6697	3.0829
2.6725	10.8196	10.8196	10.8196	10.8196	10.8196	0.6697	2.9560
1.9752	6.4530	6.4530	6.4530	6.4530	6.4530	0.6972	2.1685
1.8495	5.5637	5.5637	5.5637	5.5637	5.5637	0.6928	2.0225
1.5661	2.5510	2.5510	2.5510	2.5510	2.5510	0.7517	1.6515
1.1635	1.2750	1.2750	1.2750	1.2750	1.2750	0.9404	1.1776
1.0030	1.0042	1.0042	1.0042	1.0042	1.0042	0.9955	1.0032
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Total
[49]
=[33], [AY
2019]/AY
3.0308
3.0315
3.0315
3.0299
3.0468
3.0654
3.0829
2.9560
2.1685
2.0225
1 6515

Facility Association Residual Market (FARM) Jurisidiction: Newfoundland & Labrador

Vehicle Type: Taxi Project ID: NL-2016Q4-TX

Exh D-3b

Summary - Written Premium On-level Factors

Written Premium as at: 31-Dec-2015

(\$1s)	unless otherwis	e indicated							
Accident Year	Bodily Injury	Property Damage	DCPD	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX
	data	data	data	data	data	data	data	data	data
2006	-	-	-	17,884	3,931	-	31,723	13,856	31,602
2007	-	-	-	19,153	4,204	-	29,604	16,155	31,438
2008	-	-	-	24,558	5,151	-	38,494	19,141	34,913
2009	-	-	-	22,588	5,298	-	31,645	23,907	47,379
2010	-	-	-	23,411	5,284	-	39,378	21,151	35,271
2011	-	-	-	25,098	5,460	-	50,086	19,359	30,383
2012	-	-	-	25,941	5,556	-	62,707	26,203	28,474
2013	-	-	-	40,183	12,330	-	62,264	32,541	29,667
2014	-	-	-	51,399	17,095	-	63,561	35,397	24,879
2015	-	-	-	69,678	22,902	(25)	72,115	40,688	25,632
2016	-	-	-	69,678	22,902	(25)	72,115	40,688	25,632
2017	-	-	-	69,678	22,902	(25)	72,115	40,688	25,632
2018	-	-	-	69,678	22,902	(25)	72,115	40,688	25,632
2019	-	-	-	69,678	22,902	(25)	72,115	40,688	25,632

TPL (indivisible)	Medical Expenses	Disability Income	Death Benefits	Funeral Expenses	Supp. AccBen	All Perils	Total
[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]
FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	=sum([1] to
data	data	data	data	data	data	data	[16])
1,163,673	-	-	-	-	-	1,697	1,264,366
1,201,270	-	-	-	-	-	1,632	1,303,456
1,402,037	-	-	-	-	-	595	1,524,889
1,442,506	-	-	-	-	-	971	1,574,294
1,445,074	-	-	-	-	-	2,481	1,572,050
1,490,987	-	-	-	-	-	822	1,622,195
1,543,316	-	-	-	-	-	5,638	1,697,835
1,955,306	-	-	-	-	-	20,118	2,152,409
2,189,834	-	-	-	-	-	13,218	2,395,383
2,280,282	-	-	-	-	-	2,198	2,513,470
2,280,282	-	-	-	-	-	2,198	2,513,470
2,280,282	-	-	-	-	-	2,198	2,513,470
2,280,282	-	-	-	-	-	2,198	2,513,470
2,280,282	-	-	-	-	-	2,198	2,513,470

jurisdiction (short form): NL

major rating class: PUB

rating type: all

minor rating class: TX

Written Rate Indices - 12 month policies

Accident Year	Bodily Injury	Property Damage	DCPD	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils
	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]
	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level
	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit
2006	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3820	0.4655	0.9110
2007	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3820	0.4655	0.9110
2008	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3820	0.4655	0.9110
2009	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3820	0.4655	0.9110
2010	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3511	0.3798	0.7088
2011	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3320	0.3268	0.5839
2012	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3320	0.3268	0.5839
2013	1.2066	1.2066	1.2066	1.4131	1.4131	1.0000	0.3320	0.3268	0.5839
2014	1.5000	1.5000	1.5000	2.0000	2.0000	1.0000	0.3104	0.3125	0.4529
2015	1.5700	1.5700	1.5700	2.6925	2.7322	1.0000	0.3113	0.3278	0.3958
2016	2.0338	2.0338	2.0338	6.6960	8.2414	1.0000	0.2453	0.2967	0.4253
2017	2.6979	2.6979	2.6979	11.2118	15.5252	1.0000	0.2000	0.2722	0.4694
2018	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.1964	0.2712	0.4683
2019	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.1964	0.2712	0.4683

TPL (indivisible)	Medical Expenses	Disability Income	Death Benefits	Funeral Expenses	Supp. AccBen	All Perils	Total
[26]	[27]	[28]	[29]	[30]	[31]	[32]	[33]
=prior AY Index *(1+[42] AY chg)	=[20]	=[20]	=[20]	=[20]	=[20]	=2/3*[23] +1/3*[24]	=average([25] to)
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.4100	0.9756
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.4100	0.9765
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.4100	0.9754
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.4100	0.9764
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3610	0.9679
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3300	0.9632
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3300	0.9557
1.2070	1.4131	1.4131	1.4131	1.4131	1.4131	0.3300	1.1566
1.5003	2.0000	2.0000	2.0000	2.0000	2.0000	0.3110	1.4480
1.5708	2.6925	2.6925	2.6925	2.6925	2.6925	0.3170	1.5431
2.0342	6.6960	6.6960	6.6960	6.6960	6.6960	0.2620	2.1226
2.6994	11.2118	11.2118	11.2118	11.2118	11.2118	0.2240	2.9164
2.7966	11.8323	11.8323	11.8323	11.8323	11.8323	0.2210	3.0306
2.7966	11.8323	11.8323	11.8323	11.8323	11.8323	0.2210	3.0306

as per file on Oct 31, 2016

Exh D-3b Page 1 of 2 Facility Association Residual Market (FARM) Jurisidiction: Newfoundland & Labrador Vehicle Type: Taxi

Project ID: NL-2016Q4-TX

Exh D-3b

Summary - Written Premium On-level Factors

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

Exh D-3b Page 2 of 2

Accident Year	Bodily Injury	Property Damage	DCPD	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils
	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]
	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level
	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit
2006									
2007	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2008	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2009	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2010	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(8.1%)	(18.4%)	(22.2%)
2011	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(5.4%)	(14.0%)	(17.6%)
2012	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2013	20.7%	20.7%	20.7%	41.3%	41.3%	0.0%	0.0%	0.0%	0.0%
2014	24.3%	24.3%	24.3%	41.5%	41.5%	0.0%	(6.5%)	(4.4%)	(22.4%)
2015	4.7%	4.7%	4.7%	34.6%	36.6%	0.0%	0.3%	4.9%	(12.6%)
2016	29.5%	29.5%	29.5%	148.7%	201.6%	0.0%	(21.2%)	(9.5%)	7.5%
2017	32.7%	32.7%	32.7%	67.4%	88.4%	0.0%	(18.5%)	(8.3%)	10.4%
2018	3.6%	3.6%	3.6%	5.5%	6.3%	0.0%	(1.8%)	(0.4%)	(0.2%
2019	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

TPL (indivisible)	Medical Expenses	Disability Income	Death Benefits	Funeral Expenses	Supp. AccBen	All Perils
[42]	[43]	[44]	[45]	[46]	[47]	[48]
=average([41] to [35])	=[36]	=[36]	=[36]	=[36]	=[36]	=average([39] to [40]
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(13.3%)
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(9.7%)
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
20.7%	41.3%	41.3%	41.3%	41.3%	41.3%	0.0%
24.3%	41.5%	41.5%	41.5%	41.5%	41.5%	(5.5%)
4.7%	34.6%	34.6%	34.6%	34.6%	34.6%	2.6%
29.5%	148.7%	148.7%	148.7%	148.7%	148.7%	(15.4%)
32.7%	67.4%	67.4%	67.4%	67.4%	67.4%	(13.4%)
3.6%	5.5%	5.5%	5.5%	5.5%	5.5%	(1.1%)
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Written Rate	
Change	
[34]	
= col[33], % AY	
chg	
0.0%	
0.0%	
0.0%	
(1.0%)	
(0.7%)	
0.0%	
19.8%	
22.9%	
5.5%	
32.0%	
31.8%	
3.4%	
0.0%	
	[34] = col[33], % AY chg 0.0% 0.0% (1.0%) (0.7%) 0.0% 19.8% 22.9% 5.5% 32.0% 31.8% 3.4%

Written Premium Rate On-Level Factor to 2019

Accident Year	Bodily Injury	Property	DCPD	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils
	[33]	Damage [34]	[35]	[36]		[38]	[39]	[40]	
					[37]				[41]
	=[17], [AY	=[18], [AY	=[19], [AY	=[20], [AY	=[21], [AY	=[22], [AY	=[23], [AY	=[24], [AY	=[25], [AY
	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY
2006	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5141	0.5826	0.514
2007	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5141	0.5826	0.514
2008	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5141	0.5826	0.514
2009	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5141	0.5826	0.514
2010	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5594	0.7141	0.660
2011	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5916	0.8299	0.802
2012	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5916	0.8299	0.802
2013	2.3168	2.3168	2.3168	8.3733	11.6830	1.0000	0.5916	0.8299	0.802
2014	1.8636	1.8636	1.8636	5.9162	8.2546	1.0000	0.6327	0.8678	1.034
2015	1.7805	1.7805	1.7805	4.3945	6.0425	1.0000	0.6309	0.8273	1.183
2016	1.3745	1.3745	1.3745	1.7671	2.0032	1.0000	0.8007	0.9141	1.101
2017	1.0361	1.0361	1.0361	1.0553	1.0634	1.0000	0.9820	0.9963	0.997
2018	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000
2019	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000

TPL	Medical	Disability	Death Benefits	Funeral	Supp. AccBen	All Perils	Total
(indivisible)	Expenses	Income	Death beliefits	Expenses	эцрр. Ассьен	All Ferils	Total
[42]	[43]	[44]	[45]	[46]	[47]	[48]	[49]
=[26], [AY	=[27], [AY	=[28], [AY	=[29], [AY	=[30], [AY	=[31], [AY	=[32], [AY	=[33], [AY
2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY
2.7966	11.8323	11.8323	11.8323	11.8323	11.8323	0.5390	3.1064
2.7966	11.8323	11.8323	11.8323	11.8323	11.8323	0.5390	3.1035
2.7966	11.8323	11.8323	11.8323	11.8323	11.8323	0.5390	3.1070
2.7966	11.8323	11.8323	11.8323	11.8323	11.8323	0.5390	3.1039
2.7966	11.8323	11.8323	11.8323	11.8323	11.8323	0.6122	3.1311
2.7966	11.8323	11.8323	11.8323	11.8323	11.8323	0.6697	3.1464
2.7966	11.8323	11.8323	11.8323	11.8323	11.8323	0.6697	3.1711
2.3170	8.3733	8.3733	8.3733	8.3733	8.3733	0.6697	2.6203
1.8640	5.9162	5.9162	5.9162	5.9162	5.9162	0.7106	2.0930
1.7804	4.3945	4.3945	4.3945	4.3945	4.3945	0.6972	1.9640
1.3748	1.7671	1.7671	1.7671	1.7671	1.7671	0.8435	1.4278
1.0360	1.0553	1.0553	1.0553	1.0553	1.0553	0.9866	1.0392
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Jurisidiction: Newfoundland & Labrador

Vehicle Type: Taxi

Project ID: NL-2016Q4-TX

Exh D-4a

Summary - Premium Trend Factors

as at: 31-Dec-2015

jurisdiction (short form): NL major rating class: PUB minor rating class: TX

rating type: all

Average written date in effective period 01-Apr-2018

Premium Trend Factors to 01-Apr-2018

Year		Bodily Injury	Property Damage	DCPD	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils	TPL (indivisible)	All Perils
		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
2006		1.0123	1.0123	1.0000	1.0000	1.0000	1.0000	2.1455	2.0607	2.0607	1.0123	2.1455
2007		1.0113	1.0113	1.0000	1.0000	1.0000	1.0000	2.0159	1.9426	1.9426	1.0113	2.0159
2008		1.0103	1.0103	1.0000	1.0000	1.0000	1.0000	1.8941	1.8312	1.8312	1.0103	1.8941
2009		1.0093	1.0093	1.0000	1.0000	1.0000	1.0000	1.7800	1.7266	1.7266	1.0093	1.7800
2010		1.0083	1.0083	1.0000	1.0000	1.0000	1.0000	1.6722	1.6273	1.6273	1.0083	1.6722
2011		1.0073	1.0073	1.0000	1.0000	1.0000	1.0000	1.5711	1.5341	1.5341	1.0073	1.5711
2012		1.0063	1.0063	1.0000	1.0000	1.0000	1.0000	1.4762	1.4461	1.4461	1.0063	1.4762
2013		1.0053	1.0053	1.0000	1.0000	1.0000	1.0000	1.3873	1.3635	1.3635	1.0053	1.3873
2014		1.0043	1.0043	1.0000	1.0000	1.0000	1.0000	1.3032	1.2851	1.2851	1.0043	1.3032
2015		1.0033	1.0033	1.0000	1.0000	1.0000	1.0000	1.2245	1.2115	1.2115	1.0033	1.2245
Annual Duift	1	ī										
Annual Drift	Exh D-4b	0.10%	0.10%								0.10%	
	Exh D-4c	0.10%	0.10%	_			-	0.50%	(0.30%)	(0.30%)	0.10%	0.50%
	Exh D-4d							5.90%		6.40%		
KG DIIII	EXII D-40			-	-			5.90%	6.40%	6.40%		5.90%
Total Drift	=(1+Limit Drift)*(1+Ded Drift)*(1+RG Drift)-1	0.10%	0.10%	-	-	-	-	6.43%	6.08%	6.08%	0.10%	6.43%

Exh D-4a

Page 1 of 1

Project ID: NL-2016Q4-TX Exh D-4b

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

Exh D-4b Page 1 of 1

Limit Drift

						Facility A	ssociation				
			Wr	itten Exposure	S			Distrib	ution by Limit ((in \$ms)	
Limit (in \$ms)	Current Differential	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
	rate manual	FA AIX	FA AIX	FA AIX	FA AIX	FA AIX	=[2] as % total for [2]	=[3] as % total for [3]	=[4] as % total for [4]	=[5] as % total for [5]	=[6] as % total for [6]
Third Party Liability (TPL	_)										
\$0.2	1.000	44	42	33	25	18	100.0%	100.0%	100.0%	100.0%	100.0%
\$0.3	1.042	-	-	-	-	-	-	-	-	-	-
\$0.5	1.110	29	20	28	33	35	100.0%	100.0%	100.0%	100.0%	100.0%
\$1.0	1.220	722	750	794	709	717	100.0%	100.0%	100.0%	100.0%	100.0%
\$2.0	1.386	8	6	8	14	12	100.0%	100.0%	100.0%	100.0%	100.0%
over \$2.0 up to \$5.0	1.519	-	-	-	-	-	-	-	-	-	-
other	1.703		-	-	-	-		-	-	-	
Total		803	819	863	780	782	100.0%	100.0%	100.0%	100.0%	100.0%
	Average	0.950	0.954	0.963	0.971	0.974					
Weighted Avera	ge Differential:	1.206	1.207	1.210	1.211	1.212					
A	Annual Change:		0.1%	0.2%	0.1%	0.1%					
			geometric a	verage change,	last 4 years	0.1%					
			geometric a	verage change,	last 3 years	0.1%					
				Selected	annual Drift	0.1% s	elected geometr	ic average cha	nge, last 4 yea	rs	

Exh D-4c Page 1 of 1

Facility Association Residual Market (FARM) Jurisidiction: Newfoundland & Labrador jurisdiction (short form): NL major rating class: PUB minor rating class: TX Vehicle Type: Taxi rating type: all

Project ID: NL-2016Q4-TX Exh D-4c

Deductible Drift

Deductible							Facility A	ssociation				
				Wr	itten Exposure	S	- Tuesticy 71		Distri	bution by Ded	ucitble	
	Deducitble	Current Differential	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015
		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
		rate manual	FA AIX	FA AIX	FA AIX	FA AIX	FA AIX	=[2] as % total for [2]	=[3] as % total for [3]	=[4] as % total for [4]	=[5] as % total for [5]	=[6] as % total for [6]
Collision												
	\$0	1.149	-	-	-	-	-	-	-	-	-	-
	\$100	1.149	-	-	-	-	-	-	-	-	-	-
	\$250	1.149	2	(1)	-	1	(1)	4.4%	(1.2%)	-	1.7%	(1.2%
	\$300	1.000	-	-	-	-	-	-	-	-	-	-
	\$500	1.000	21	35	27	32	44	53.5%	68.9%	57.5%	58.9%	63.1%
	\$1,000	0.828	3	4	11	14	20	8.1%	8.6%	23.1%	26.0%	27.9%
	over \$1,000	0.747	14 40	12	9	7	7 70	34.0% 100.0%	23.7%	19.5%	13.4%	10.2%
	Total Ave	rage Deducitble	869	51 782	46 810	55 760	745	100.0%	100.0%	100.0%	100.0%	100.0%
	Weighted Avera	ge Differential: Innual Change:	0.907	0.924 1.9%	0.911 (1.4%)	0.924 1.4%	0.924					
	•	au enange.			verage change,		0.5%					
				geometric a	verage change,		-					
					Selected	annual Drift	0.5% s	elected geomet	ric average cha	nge, last 4 yea	rs	
Comprehe												
	\$0	1.086			-		-					
	\$100	1.086	10	9	14	9	4	14.8%	9.7%	13.0%	7.4%	3.19
	\$250	1.086	27	37	46	45	15	38.1%	41.2%	41.4%	37.4%	12.5%
	\$300	1.000	-	-	-	-	-	-	-		-	-
	\$500	1.000	13	28	36	55	90	18.6%	31.4%	32.3%	45.7%	74.7%
	\$1,000	0.926	2	3	4	3	4	2.6%	3.7%	3.8%	2.7%	3.3%
	over \$1,000	0.889	18	13	11	8	8	25.9%	14.1%	9.5%	6.7%	6.5%
	Total Ave	rage Deducitble	70 617	91 517	110 459	120 457	121 538	100.0%	100.0%	100.0%	100.0%	100.0%
	Mainhand Accoun	Diff	4.045	4.025	4.022	1 020	4.004					
	Weighted Avera	nnual Change:	1.015	1.025 1.0%	1.033 0.8%	1.029 (0.4%)	1.004 (2.4%)					
	,	uniuai change.			verage change,		(0.3%)					
					verage change,		(0.7%)					
				geometric a		annual Drift		elected geomet	ric average cha	nge, last 4 yea	rs	
Specified P	Perils											
	\$0	1.086	0		-	-	-	0.1%	-			-
	\$100	1.086	18	15	8	10	3	7.6%	6.4%	3.7%	4.5%	1.3%
	\$250	1.086	147	148	154	161	126	62.3%	64.8%	67.9%	72.5%	57.9%
	\$300	1.000	-	-	-	-	-	-	-	-	-	-
	\$500	1.000	13	25	34	31	73	5.3%	11.2%	15.1%	14.1%	33.5%
			(0)	-			1	-	-			0.6%
		0.889										6.7%
		rage Deducithle						100.0%	100.0%	100.0%	100.0%	100.0%
		_										
	Weighted Avera	-	1.033	1.042	1.047	1.057	1.043					
	A	nnual Change:		0.9%	0.5%	1.0%	(1.3%)					
					verage change,		0.3%					
				geometric a	verage change,		0.1%					
						annual Drift		qual comp				
	\$500 \$1,000 over \$1,000 Total Ave	1.000 0.926 0.889 rage Deducitble ge Differential:	13 (0) 58 236 560	40 228 489 1.042 0.9% geometric a	34 2 28 226 444 1.047 0.5% verage change,	31 2 18 222 386 1.057 1.0% , last 4 years , last 3 years	73 1 15 217 420 1.043 (1.3%) 0.3% 0.1%	5.3% - 24.7% 100.0%	11.2% - 17.6% 100.0%			

Project ID: NL-2016Q4-TX

Exh D-4d

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

Exh D-4d Page 1 of 4

Derivation of Average Rate Group Differentials Distribution by Rate Group MSRP CLEAR 2011 2012 2015 2010 2015 Rate Group 2013 2014 2011 2012 2013 2014 differential differential [1] [2] [11] =[4] as % =[6] as % Current Current =[3] as % =[5] as % =[7] as % =[8] as % Internal Data Internal Data Internal Data Internal Data Internal Data Differentials Differentials total for [3] total for [4] total for [5] total for [6] total for [7] total for [8] **Accident Benefits** 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48

weighted average differential annual change

49 50 total

geometric average change, last 4 years

geometric average change, last 3 years selected annual drift:

selected as geometric average change, last 4 years

Exh D-4d

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

Exh D-4d Page 2 of 4

Derivation of Average Rate Group Differentials

											Distribution l	y Rate Group		
	Rate Group	MSRP differential	CLEAR differential	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
		[1]	[2]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
		Current Differentials	Current Differentials	Internal Data	=[3] as % total for [3]	=[4] as % total for [4]	=[5] as % total for [5]	=[6] as % total for [6]	=[7] as % total for [7]	=[8] as % total for [8]				
Collision														
	1	0.300	0.300						-	-	-	-	-	-
	2	0.395	0.395						-	-	-	-	-	-
	3 4	0.495	0.495						-	-		-		
	5	0.695	0.695						_		_	_	_	
	6	0.795	0.795						-	-	-		-	-
	7	0.895	0.895						-	=	-	-	-	-
	8	0.995	0.995						-	-	-	-	-	-
	9	1.095	1.095							-	-	-	-	-
	10	1.195	1.195						-	-	-	-	-	-
	11 12	1.295 1.395	1.295 1.395						-	-	-	-	-	-
	13	1.495	1.495							-		-	-	-
	14	1.595	1.595						-	-	-	-	-	-
	15	1.695	1.695							-	-	_		
	16	1.795	1.795						-	-	-	-	-	-
	17	1.895	1.895						-	=	-	-	-	-
	18	1.995	1.995							-	-	-	-	-
	19	2.095	2.095						-	-	-	-	-	-
	20 21	2.195 2.295	2.195 2.295						-	-	-	-	-	-
	22	2.395	2.395											
	23	2.495	2.495						_	-				
	24	2.595	2.595						-	=	-	-	-	-
	25	2.695	2.695						-	=	-	-	-	-
	26	2.795	2.795						-	-	-	-	-	-
	27	2.895	2.895							-	-	-	-	-
	28	2.995 3.145	2.995 3.145						-	-	-	-	-	-
	29 30	3.145	3.145						-	-	-	-	-	-
	31	3.545	3.545							-	-		-	-
	32	3.745	3.745						-	=	-	-	-	-
	33	3.945	3.945							-	-	-	-	-
	34	4.145	4.145						-	-	-	-	-	-
	35	4.345	4.345						=	-	-	-	-	-
	36	4.545	4.545						-	-	-	-	-	-
	37 38	4.745 4.945	4.745 4.945						-	-	-	-	-	-
	39	5.145	5.145							-	-	-	-	-
	40	5.345	5.345							-	-	-	-	-
	41	5.545	5.545						-	-	-	-	-	-
	42	5.745	5.745							-	-	-	-	-
	43	5.945	5.945						-	-	-	-	-	-
	44	6.145	6.145						-	-	-	-	-	-
	45	6.345	6.345						-	-	-	-	-	-
	46 47	6.545 6.745	6.545 6.745						-	-	-	-	-	-
	47	6.745	6.945						-	-	-	-	-	-
	49	7.145	7.145							-		-	-	
	50	7.345	7.345						-	-	-	-	-	-
	51	7.545	7.545						-	=	-	-	-	-
	total				-	-	-			-	-	-	-	-

weighted average differential annual change geometric average change, last 4 years

geometric average change, last 3 years selected annual drift:

5.9% assume the RG drift is the same as PPV RG drift

Exh D-4d

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

Exh D-4d Page 3 of 4

Derivation of Average Rate Group Differentials

Marten M									-		Distribution I	y Rate Group		
Current Curr	Rate Group													2015
Differential Dif		[1]	[2]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
1 0.300 0.300 1.30				Internal Data						=[8] as % total for [8]				
2 0.395 0.395 0.395	Comprehensive													
3 0.495 0.495									-	-	-	-	-	-
4 0.595 0.595 0.595 0.595 0.79									-	-	-	-	-	-
5 0.695 0.795 -										-	-	-	-	-
6 0.785 0.795 0.795 7 0.885 0.895									-	-	-	-	-	-
7 0.895 0.895 0.895									-	-				-
8 0.995 0.995										-	-	-	-	-
9 1.095 1.095									-	=	-	-	-	_
11 1.295 1.295 12 1.395 1.495 14 1.595 1.595 15 1.695 - 16 1.795 - 17 1.895 1.895 18 1.995 - 19 2.095 - 20 2.195 - 21 2.295 2.295 21 2.295 2.295 22 2.395 2.995 23 2.495 2.495 24 2.595 2.295 25 2.695 - 26 2.795 - 27 2.895 2.995 28 2.995 - 29 3.145 3.145 30 3.445 3.145 30 3.445 3.145 31 3.545 3.545 32 3.745 3.745 33 3.946 3.945 34 4.145 - 36 4.545 - 3									-	-	-	-	-	-
112 1.395 1.395 - - 13 1.495 1.595 - - 14 1.595 1.595 - - 15 1.695 1.695 - - 16 1.795 1.795 - - 17 1.895 1.895 - - 18 1.995 - - - 20 2.195 1.995 - - 20 2.195 2.095 - - 21 2.295 2.295 - - 22 2.395 - - - 24 2.595 2.595 - - 24 2.595 2.595 - - 25 2.695 2.995 - - 26 2.795 - - - 27 2.895 2.995 - - - 28 2.995 - - - - 28 2.995 - - - - 29 3.145 3.145 3.145 - - - 30 3.345 3.345 - - - <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>									-	-	-	-	-	-
13 1.495 1.495 -									-	-	-	-	-	-
14 1.595 1.595 -										-	-	-	-	-
15 1.695 1.695 -										=-	-	-		-
16 1.795 1.795 17 1.895 1.995 18 1.995 1.995 20 2.195 2.295 20 2.195 2.295 21 2.295 - 22 2.395 2.395 23 2.495 2.295 24 2.595 - 25 2.695 - 26 2.795 - 27 2.895 - 28 2.995 - 29 3.145 3.145 30 3.345 3.345 31 3.545 3.545 32 3.745 3.745 33 3.945 - 34 4.145 4.145 35 4.345 - 37 4.745 4.745 38 4.945 - 40 5.345 - 41 5.545 5.545 43 5.945 - 44 6.145 6.345 45 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>									-	-	-	-	-	-
17 1.895 1.895 18 1.995 2.095 19 2.095 - 20 2.195 - 21 2.295 2.295 22 2.395 2.395 23 2.495 - 24 2.595 2.595 25 2.695 - 26 2.795 2.795 27 2.895 2.995 28 2.995 2.995 29 3.145 3.145 30 3.345 3.345 31 3.545 3.545 32 3.745 3.745 33 3.945 - 34 4.145 - 35 4.345 - 36 4.345 - 37 4.745 4.745 39 5.145 5.445 40 5.345 - 41 5.545 - 42 5.745 - 43 5.945 - 44										-	-	-	-	-
18 1.995 1.995 19 2.095 - 20 2.195 2.195 21 2.295 - 22 2.395 - 23 2.495 2.495 24 2.595 - 25 2.695 2.695 26 2.795 2.895 28 2.995 - 27 2.895 2.895 28 2.995 - 29 3.145 3.145 30 3.345 3.345 31 3.545 - 32 3.745 3.745 33 3.945 - 34 4.145 4.145 35 4.345 - 36 4.545 - 37 4.745 4.745 39 5.145 5.545 40 5.345 - 41 5.545 - 43 5.945 - 44 6.745 6.745 48 6.945 6.945 49 7.145 7.445 50 7.345 - - 51 7.745 - - <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>														
19									_	_	_	_	_	
21 2.295 - - - 22 2.395 2.395 - - - 24 2.595 2.595 - - - - 25 2.695 2.695 - <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>									-	-	-	-	-	-
22 2.395 2.395 23 2.495 2.495 24 2.595 - - 25 2.695 2.795 - - 26 2.795 - - - 27 2.895 2.895 - - - 28 2.995 2.995 -	20	2.195	2.195						-	-	-	-	-	-
23 2.495 2.495 24 2.595 2.695 25 2.695 2.695 26 2.795 2.795 27 2.895 - 28 2.995 2.995 29 3.145 3.145 30 3.345 3.345 31 3.545 3.545 32 3.745 - 33 3.945 3.945 34 4.145 - 35 4.345 4.145 36 4.545 - 37 4.745 4.745 38 4.945 4.945 39 5.145 - 40 5.345 - 41 5.545 - 42 5.745 5.545 43 5.945 - 44 6.145 - 45 6.345 - 46 6.545 - 47 6.745 6.545 49 7.145 7.345 51 <td>21</td> <td>2.295</td> <td>2.295</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>=</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>	21	2.295	2.295						-	=	-	-	-	-
24 2.595 2.595 -									-	-	-	-	-	-
25 2.695 2.695 -									-	-	-	-	-	-
26 2.795 2.795 -										-	-	-	-	-
27 2.895 2.895 -									-	-	-	-		-
28 2.995 2.995 -										_		_		-
29 3.145 3.145 3.345 -										-				
30 3.345 3.345 3.545									-	=	-	-	-	-
31									-	=	-	-	-	-
33 3.945 3.945 34 4.145 - - - - 35 4.345 4.345 - - - - - 36 4.545 4.545 - <td></td> <td>3.545</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>		3.545							-	-	-	-	-	-
34 4.145 4.145 -	32	3.745	3.745						-	-	-	-	-	-
35 4.345 4.345 -									_	-	-	-	-	-
36 4.545 4.545 -									-	-	-	-	-	-
37 4.745 4.745 38 4.945 - - - - 39 5.145 5.145 - - - - - 40 5.345 5.345 - <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>=</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>									-	=	-	-	-	-
38 4.945 4.945 -										-				
39									-	-				-
40 5.345 5.345 4.1 5.545 5.545									_	-				
41 5.545 5.545 - - - - 42 5.745 5.745 - - - - 43 5.945 5.945 - - - - - 44 6.145 6.145 - - - - - 45 6.345 6.345 - - - - - 46 6.545 6.545 - - - - - 47 6.745 6.745 - - - - - 48 6.945 6.945 - - - - - 49 7.145 7.145 - - - - - - 50 7.345 7.345 - <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>									-	-	-	-	-	-
43 5.945 5.945 44 6.145 6.145 45 6.345 6.345 46 6.545 6.545 47 6.745 6.745 48 6.945 6.945 49 7.145 7.145 50 7.345 7.345 51 7.545 7.545									-	-	-	-	-	-
44 6.145 6.145 -	42_	5.745							-	-	-	-	-	-
45 6.345 6.345 6.345									-	-	-	-	-	-
46 6.545 6.545 4.745									-	-	-	=	-	-
47 6.745 6.745 48 6.945 6.945 49 7.145 50 7.345 51 7.545 7.545									-	-	-	-	-	-
48 6.945 6.945 49 7.145 7.145 50 7.345									-	-	-	-	-	-
49 7.145 - <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>									-	-	-	-	-	-
50 7.345 7.345										-				-
51 7.545 7.545									-	-	-	-	-	-
									-	-	-	-	-	-
	total			-	-	-	=	-	-	=	-	-	-	-

weighted average differential annual change

geometric average change, last 4 years geometric average change, last 3 years selected annual drift:

6.4% assume the RG drift is the same as PPV RG drift

Exh D-4d

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

Exh D-4d Page 4 of 4

Derivation of Average Rate Group Differentials

											Distribution I	by Rate Group		
	Rate Group	MSRP differential	CLEAR differential	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
		[1]	[2]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
		Current Differentials	Current Differentials	Internal Data	=[3] as % total for [3]	=[4] as % total for [4]	=[5] as % total for [5]	=[6] as % total for [6]	=[7] as % total for [7]	=[8] as % total for [8				
pecified Pe														
	1	0.300	0.300						=	=	-	-	-	-
	2	0.395	0.395						-	-	-	-	-	-
	3	0.495	0.495							-	-	-	-	-
	4 5	0.695	0.695						-		-		-	-
	6	0.795	0.795						_	-	-	-	-	-
	7	0.895	0.895							-	-		-	-
	8	0.995	0.995						-	=	-	-	-	-
	9	1.095	1.095						-	-	-	-	-	-
	10	1.195	1.195						-	=	-	-	-	-
	11	1.295	1.295						-	=	-	-	-	-
	12	1.395	1.395							-	-	-	-	-
	13	1.495	1.495						-	-	-	-	-	-
	14	1.595	1.595						-	-	-	-	-	-
	15 16	1.695 1.795	1.695 1.795							-	-	-	-	
	17	1.895	1.895						-	-	-	-	-	
	18	1.995	1.995						_	_	_	_	_	
	19	2.095	2.095											
	20	2.195	2.195						-	-	-	-	-	
	21	2.295	2.295						-	-	-	-	-	
	22	2.395	2.395						-	-	-	-	-	
	23	2.495	2.495						-	-	-	-	-	
	24	2.595	2.595							-	-	-	-	
	25	2.695	2.695						-	-	-	-	-	
	26	2.795	2.795						-	-	-	-	-	
	27	2.895	2.895							-	-	-	-	
	28	2.995	2.995						-	-	-	-	-	
	29 30	3.145 3.345	3.145 3.345						-	-	-	-	-	
	31	3.545	3.545											
	32	3.745	3.745						_	_	_	_	_	
	33	3.945	3.945						_	_	_	_	_	
	34	4.145	4.145						-	-	-	-	-	
	35	4.345	4.345						-	-	-	-	-	
	36	4.545	4.545							-	-	=	-	
	37	4.745	4.745						-	-	-	-	-	
	38	4.945	4.945						=	=	-	-	-	
	39_	5.145	5.145							-	-	-	-	
	40	5.345	5.345						-	-	-	-	-	
	41 42	5.545 5.745	5.545 5.745						-	-	-	-	-	
	42	5.745	5.745							-				
	45	6.145	6.145							-	-		-	
	45	6.345	6.345						_	_	_	_	_	
	46	6.545	6.545							-	-	-	-	
	47	6.745	6.745						-	-	-	-	-	
	48	6.945	6.945						-		-	-	-	
	49	7.145	7.145						-	-	-	-	-	
	50	7.345	7.345						-	-	-	-	-	
	51	7.545	7.545							-	-	-	-	
	total			-	-	-	-	-	-	-	-	-	-	

weighted average differential annual change

geometric average change, last 4 years

geometric average change, last 3 years selected annual drift:

6.4% used comphrensive

type: FA Selected market: INDUSTRY rating class: CV as at: 31-Dec-15 jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all Exh D-5a Page 1 of 1

Exh D-5a

Summary - Loss Cost Projection Factors

		30-Sep-2018		As per Exh D-5		Davidson 1			Constitution of	TDI	N 4 11 1	Disability		Francis			
Accident Year	Bodily Injury	Property Damage	DCPD	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils	TPL (indivisible)	Medical Expenses	Disability Income	Death Benefits	Funeral Expenses	Supp. AccBen	All Perils	Total
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]
	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b
	column [35]	column [36]	column [37]	column [38]	column [39]	column [40]	column [41]	column [42]	column [43]	column [44]	column [45]	column [46]	column [47]	column [48]	column [49]	column [50]	column [5
2006	1.5202	1.2830	1.2830	1.8521	2.6053	1.0000	1.0000	1.0000	1.0000	1.4590	-	-	-	-	-	1.0000	1.47
2007	1.4690	1.2572	1.2572	1.8521	2.4055	1.0000	1.0000	1.0000	1.0000	1.4150	_	_	_	-	_	1.0000	1.44
2008	1.4197	1.2319	1.2319	1.8521	2.2284	1.0000	1.0000	1.0000	1.0000	1.3722	_	_	_	-	_	1.0000	1.40
2009	1.3720	1.2070	1.2070	1.8521	2.0610	1.0000	1.0000	1.0000	1.0000	1.3307	_	_	_	_	_	1.0000	1.36
2010	1.3259	1.1826	1.1826	1.8521	1.9046	1.0000	1.0000	1.0000	1.0000	1.2904	_	_	_	_	_	1.0000	1.32
2011	1.2813	1.1589	1.1589	1.2988	1.7631	1.0000	1.0000	1.0000	1.0000	1.2513	_	_	_	_	_	1.0000	1.27
2012	1.2382	1.1356	1.1356	1.0000	1.6289	1.0000	1.0000	1.0000	1.0000	1.2134	_				_	1.0000	1.22
2012	1.1966	1.1127	1.1127	1.0000	1.5060	1.0000	1.0000	1.0000	1.0000	1.1765					_	1.0000	1.18
2013	1.1564	1.0904	1.0904	1.0000	1.3937	1.0000	1.0000	1.0000	1.0000	1.1407	_	_	_	_	_	1.0000	1.13
2014	1.1175	1.0683	1.0683	1.0000	1.2893	1.0000	1.0000	1.0000	1.0000	1.1060						1.0000	1.09
2013	1.11/3	1.0003	1.0003	1.0000	1.2033	1.0000	1.0000	1.0000	1.0000	1.1000						1.0000	1.03
Modeled Loss C	Cost			As per Exh D-5l	h												
	unless otherwis	e indicated		As per Exil D-3													
(13)	uniess otherwis	Property		AccBen	Uninsured	Underinsured			Specified	TPL	Medical	Disability		Funeral			
Accident Year	Bodily Injury	Damage	DCPD	(indivisible)	Automobile	Motorist	Collision	Comp	Perils	(indivisible)	Expenses	Income	Death Benefits	Expenses	Supp. AccBen	All Perils	Total
	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	[32]	[33]	[34]
	[10]	[19]	[20]	LC Model	[22]	[23]	[24]	[23]	[20]	[27]	[20]	[23]	[30]	[31]	[32]	[55]	[54]
	LC Model	LC Model	LC Model		LC Model	LC Model	LC Model	LC Model	LC Model	=sum([18] to	LC Model	LC Model	LC Model	I C Madal	LC Model	-2/2*[24]	average usi
				Output +										LC Model		=2/3*[24] +	FARM
	Output	Output	Output	sum([28] to	Output	Output	Output	Output	Output	[20])	Output	Output	Output	Output	Output	1/3*[25])	exposures
2006	457.81	159.13		[32]) 15.28	3.37	0.68	258.13	179.72	64.58	616.94	_				_	231.99	677.9
2006	473.74		-		3.65	0.68		179.72	64.58		-	-	-	-	-		695.1
	473.74	162.40 165.74		15.28 15.28	3.94	0.68	258.13	179.72		636.14	-	-	-	-		231.99	
2008			-				258.13		64.58	655.94	-	-	-	-	-	231.99	711.6
2009	507.26	169.15	-	15.28	4.26	0.68	258.13	179.72	64.58	676.41	-	-	-	-	-	231.99	732.8
2010	524.89	172.64	-	15.28	4.61	0.68	258.13	179.72	64.58	697.53	-	-	-	-	-	231.99	757.9
2011	543.15	176.17	-	21.79	4.98	0.68	258.13	179.72	64.58	719.32	-	-	-	-	-	231.99	788.2
2012	562.04	179.79	-	28.30	5.39	0.68	258.13	179.72	64.58	741.83	-	-	-	-	-	231.99	820.5
2013	581.59	183.49	-	28.30	5.83	0.68	258.13	179.72	64.58	765.08	-	-	-	-	-	231.99	849.5
2014	601.81	187.25	-	28.30	6.30	0.68	258.13	179.72	64.58	789.06	-	-	-	-	-	231.99	880.9
2015	622.75	191.12	-	28.30	6.81	0.68	258.13	179.72	64.58	813.87	-	-	-	-	-	231.99	914.4
2016	644.40	195.03	-	28.30	7.37	0.68	258.13	179.72	64.58	839.43	-	-	-	-	-	231.99	940.5
2017	666.82	199.05	-	28.30	7.97	0.68	258.13	179.72	64.58	865.87	-	-	-	-	-	231.99	967.6
2018	690.01	203.14	-	28.30	8.61	0.68	258.13	179.72	64.58	893.15	-	-	-	-	-	231.99	995.5
2019	714.01	207.32	-	28.30	9.31	0.68	258.13	179.72	64.58	921.33	-	-	-	-	-	231.99	1,024.4
2020	738.84	211.58	-	28.30	10.07	0.68	258.13	179.72	64.58	950.42	-	-	-	-	-	231.99	1,054.3
@ projected av	g accident date:			As per Exh D-5l	b												
prior analysis																	
30-Sep-2017	672.55	200.06	-	28.30	8.13	0.68	258.13	179.72	64.58	872.61	-	-	-	-	-	231.99	974.5
30 3CP 2017																	
	weights by AY:	2017	75.3%	2018	24.7%												
current analysis	s																
30-Sep-2018	695.94	204.17	-	28.30	8.78	0.68	258.13	179.72	64.58	900.11	-	-	-	-	-	231.99	1,00

2018

75.3%

2019

24.7%

weights by AY:

Project ID: NL-2016Q4-TX
Exh D-5b

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all Exh D-5b Page 1 of 2

Summary - Loss Cost Projection Factors (BASED ON FA SELECTED MODELS)

	Bodily Injury [1]	Property															
2007 2008 2009	[1]	Damage	DCPD	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils	TPL (indivisible)	Medical Expenses	Disability Income	Death Benefits	Funeral Expenses	Supp. AccBen	All Perils	Total
2007 2008 2009	FARM AIX	[2] FARM AIX	[3] FARM AIX	[4] FARM AIX	[5] FARM AIX	[6] FARM AIX	[7] FARM AIX	[8] FARM AIX	[9] FARM AIX	[10] FARM AIX	[11] FARM AIX	[12] FARM AIX	[13] FARM AIX	[14] FARM AIX	[15] FARM AIX	[16] FARM AIX	[17] =max([1] t
2007 2008 2009	data	data	data	data	data	data	data	data	data	data	data	data	data	data	data	data	[3])+[10]
2007 2008 2009	-	-	-	414	570	-	27	51	164	573	-	=	-	-	=	-	5
2008 2009	-	-	-	457	662	=	24	49	224	663	-	-	-	-	-	1	6
	-	-	-	519	719	-	27	46	219	725	-	-	-	-	-	1	7.
2010	-	-	-	553	758	-	21	52	254	764	-	=.	-	-	-	1	7
	-	=	=	582	776	=	28	62	249	780	-	=	-	-	-	1	7
2011	-	=	=	611	793	=	36	67	241	793	-	=	-	-	-	2	7:
2012	-	=	=	639	816	=	46	79	235	816	-	=	=	-	-	2	8
2013	-	=	=	693	854	=	49	100	231	852	-	=	-	-	=	8	8
2014	-	-	-	682	826	-	51	115	220	820	-	-	-	-	-	12	8
2015	-	=	-	675	804	-	64	127	227	795	-	-	-	-	-	6	7:
2016	-	-	-	675	804	-	64	127	227	795	-	=-	-	-	-	6	7:
2017	-	-	-	675	804	-	64	127	227	795	-	-	-	-	-	6	7:
2018	-	-	-	675	804	-	64	127	227	795	-	-	-	-	-	6	7:
2019	-	-	-	675	804	-	64	127	227	795	-	-	-	-	-	6	7
2020	-	-	-	675	804	-	64	127	227	795	-	=	-	-	-	6	7
lodeled Loss Co	ost unless otherwis	se indicated	INDUSTRY	as at:	31-Dec-2015												
		Property		AccBen	Uninsured	Underinsured			Specified	TPL	Medical	Disability		Funeral			
Accident Year	Bodily Injury	Damage	DCPD	(indivisible)	Automobile	Motorist	Collision	Comp	Perils	(indivisible)	Expenses	Income	Death Benefits	Expenses	Supp. AccBen	All Perils	Total
	[18]	[19]	[20]	[21] LC Model	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	[32]	[33]	[34]
	LC Model	LC Model	LC Model	Output +	LC Model	LC Model	LC Model	LC Model	LC Model	=sum([18] to	LC Model	LC Model	LC Model	LC Model	LC Model	=2/3*[24] +	average usi
	Output	Output	Output	sum([28] to	Output	Output	Output	Output	Output	[20])	Output	Output	Output	Output	Output	1/3*[25])	FARM
	Output	Output	Output	[32])	Output	Output	Output	Output	Output	[20])	Output	Output	Output	Output	Output	1/3 [23]/	exposures
	457.81	159.13															
2006			_	,	3.37	0.68	258.13	179.72	64.58	616.94	-	_			_	231.99	677.9
2006	473.74		-	15.28	3.37 3.65	0.68 0.68	258.13 258.13	179.72 179.72	64.58 64.58	616.94 636.14	-	=	-	-	-	231.99 231.99	
2007	473.74 490.20	162.40	-	15.28 15.28	3.65	0.68	258.13	179.72	64.58	636.14	-	- - -	- - -	- -		231.99	695.
2007 2008	473.74 490.20 507.26		- - -	15.28								- - -	- - -	- - -	=		695.3 711.6
2007	490.20	162.40 165.74	- - - -	15.28 15.28 15.28	3.65 3.94	0.68 0.68	258.13 258.13	179.72 179.72	64.58 64.58	636.14 655.94	- - - -	- - - -	- - - -	- - - -	=	231.99 231.99	677.9 695.2 711.6 732.8 757.9
2007 2008 2009	490.20 507.26	162.40 165.74 169.15	- - -	15.28 15.28 15.28 15.28	3.65 3.94 4.26	0.68 0.68 0.68	258.13 258.13 258.13	179.72 179.72 179.72	64.58 64.58 64.58	636.14 655.94 676.41	-	- - - - -	- - - - -	- - - -	- - -	231.99 231.99 231.99	695.: 711.(732.) 757.
2007 2008 2009 2010	490.20 507.26 524.89	162.40 165.74 169.15 172.64	- - -	15.28 15.28 15.28 15.28 15.28	3.65 3.94 4.26 4.61	0.68 0.68 0.68	258.13 258.13 258.13 258.13	179.72 179.72 179.72 179.72	64.58 64.58 64.58 64.58	636.14 655.94 676.41 697.53	-	- - - - -	- - - - - -	- - - - -	-	231.99 231.99 231.99 231.99	695.: 711.0 732.: 757.: 788.:
2007 2008 2009 2010 2011	490.20 507.26 524.89 543.15	162.40 165.74 169.15 172.64 176.17	- - -	15.28 15.28 15.28 15.28 15.28 15.28 21.79	3.65 3.94 4.26 4.61 4.98	0.68 0.68 0.68 0.68	258.13 258.13 258.13 258.13 258.13	179.72 179.72 179.72 179.72 179.72	64.58 64.58 64.58 64.58 64.58	636.14 655.94 676.41 697.53 719.32		- - - - -	- - - - - -	- - - - -	- - - -	231.99 231.99 231.99 231.99 231.99	695.1 711.6 732.8 757.9 788.2
2007 2008 2009 2010 2011 2012	490.20 507.26 524.89 543.15 562.04	162.40 165.74 169.15 172.64 176.17 179.79	- - -	15.28 15.28 15.28 15.28 15.28 15.28 21.79 28.30	3.65 3.94 4.26 4.61 4.98 5.39	0.68 0.68 0.68 0.68 0.68	258.13 258.13 258.13 258.13 258.13 258.13	179.72 179.72 179.72 179.72 179.72 179.72	64.58 64.58 64.58 64.58 64.58 64.58	636.14 655.94 676.41 697.53 719.32 741.83	-	-	- - - - - - -	- - - - - -	- - - -	231.99 231.99 231.99 231.99 231.99 231.99	695.: 711.6 732.8 757.9 788.2 820.9
2007 2008 2009 2010 2011 2012 2013	490.20 507.26 524.89 543.15 562.04 581.59	162.40 165.74 169.15 172.64 176.17 179.79 183.49	- - -	15.28 15.28 15.28 15.28 15.28 15.28 21.79 28.30 28.30	3.65 3.94 4.26 4.61 4.98 5.39 5.83	0.68 0.68 0.68 0.68 0.68 0.68	258.13 258.13 258.13 258.13 258.13 258.13 258.13	179.72 179.72 179.72 179.72 179.72 179.72 179.72	64.58 64.58 64.58 64.58 64.58 64.58	636.14 655.94 676.41 697.53 719.32 741.83 765.08		-	- - - - - - - -	- - - - - - - -	- - - -	231.99 231.99 231.99 231.99 231.99 231.99 231.99	695.: 711.6 732.8 757.9 788.2 820.9 849.9
2007 2008 2009 2010 2011 2012 2013 2014	490.20 507.26 524.89 543.15 562.04 581.59 601.81	162.40 165.74 169.15 172.64 176.17 179.79 183.49 187.25	- - -	15.28 15.28 15.28 15.28 15.28 15.28 21.79 28.30 28.30 28.30	3.65 3.94 4.26 4.61 4.98 5.39 5.83 6.30	0.68 0.68 0.68 0.68 0.68 0.68 0.68	258.13 258.13 258.13 258.13 258.13 258.13 258.13 258.13	179.72 179.72 179.72 179.72 179.72 179.72 179.72 179.72	64.58 64.58 64.58 64.58 64.58 64.58 64.58 64.58	636.14 655.94 676.41 697.53 719.32 741.83 765.08 789.06	-	- - - - - - - - - - - - - - - - - - -	- - - - - - - -	- - - - - - - - - -	-	231.99 231.99 231.99 231.99 231.99 231.99 231.99 231.99	695.: 711.6 732.8
2007 2008 2009 2010 2011 2012 2013 2014 2015	490.20 507.26 524.89 543.15 562.04 581.59 601.81 622.75	162.40 165.74 169.15 172.64 176.17 179.79 183.49 187.25 191.12	- - -	15.28 15.28 15.28 15.28 15.28 21.79 28.30 28.30 28.30 28.30	3.65 3.94 4.26 4.61 4.98 5.39 5.83 6.30 6.81	0.68 0.68 0.68 0.68 0.68 0.68 0.68	258.13 258.13 258.13 258.13 258.13 258.13 258.13 258.13 258.13	179.72 179.72 179.72 179.72 179.72 179.72 179.72 179.72 179.72	64.58 64.58 64.58 64.58 64.58 64.58 64.58 64.58 64.58	636.14 655.94 676.41 697.53 719.32 741.83 765.08 789.06 813.87	-	- - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - -	-	231.99 231.99 231.99 231.99 231.99 231.99 231.99 231.99 231.99	695.: 711.6 732.8 757.: 788.: 820.: 849.: 880.: 914
2007 2008 2009 2010 2011 2012 2013 2014 2015 2016	490.20 507.26 524.89 543.15 562.04 581.59 601.81 622.75 644.40	162.40 165.74 169.15 172.64 176.17 179.79 183.49 187.25 191.12	- - -	15.28 15.28 15.28 15.28 15.28 21.79 28.30 28.30 28.30 28.30 28.30	3.65 3.94 4.26 4.61 4.98 5.39 5.83 6.30 6.81 7.37	0.68 0.68 0.68 0.68 0.68 0.68 0.68 0.68	258.13 258.13 258.13 258.13 258.13 258.13 258.13 258.13 258.13 258.13	179.72 179.72 179.72 179.72 179.72 179.72 179.72 179.72 179.72 179.72	64.58 64.58 64.58 64.58 64.58 64.58 64.58 64.58 64.58	636.14 655.94 676.41 697.53 719.32 741.83 765.08 789.06 813.87 839.43	-	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	-	231.99 231.99 231.99 231.99 231.99 231.99 231.99 231.99 231.99 231.99	695.: 711.6 732.8 757.9 788.2 820.9 849.9 880.9
2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017	490.20 507.26 524.89 543.15 562.04 581.59 601.81 622.75 644.40 666.82	162.40 165.74 169.15 172.64 176.17 179.79 183.49 187.25 191.12 195.03	- - -	15.28 15.28 15.28 15.28 15.28 21.79 28.30 28.30 28.30 28.30 28.30	3.65 3.94 4.26 4.61 4.98 5.39 5.83 6.30 6.81 7.37	0.68 0.68 0.68 0.68 0.68 0.68 0.68 0.68	258.13 258.13 258.13 258.13 258.13 258.13 258.13 258.13 258.13 258.13 258.13	179.72 179.72 179.72 179.72 179.72 179.72 179.72 179.72 179.72 179.72 179.72	64.58 64.58 64.58 64.58 64.58 64.58 64.58 64.58 64.58 64.58	636.14 655.94 676.41 697.53 719.32 741.83 765.08 789.06 813.87 839.43	-	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - -	-	231.99 231.99 231.99 231.99 231.99 231.99 231.99 231.99 231.99 231.99	695 711.6 732.8 757.9 788 820 849 880 914 940

Exh D-5b

Project ID: NL-2016Q4-TX

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

Summary - Loss Cost Projection Factors (BASED ON FA SELECTED MODELS)

Loss Cost Projection Factors to 30-Sep-2018

Accident Year	Bodily Injury	Property Damage	DCPD	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils
	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]
	=[18], [@ proj date]/AY	=[19], [@ proj date]/AY	=[20], [@ proj date]/AY	=[21], [@ proj date]/AY	=[22], [@ proj date]/AY	=[23], [@ proj date]/AY	=[24], [@ proj date]/AY	=[25], [@ proj date]/AY	=[26], [@ proj date]/AY
2006	1.5202	1.2830	1.2830	1.8521	2.6053	1.0000	1.0000	1.0000	1.0000
2007	1.4690	1.2572	1.2572	1.8521	2.4055	1.0000	1.0000	1.0000	1.0000
2008	1.4197	1.2319	1.2319	1.8521	2.2284	1.0000	1.0000	1.0000	1.0000
2009	1.3720	1.2070	1.2070	1.8521	2.0610	1.0000	1.0000	1.0000	1.0000
2010	1.3259	1.1826	1.1826	1.8521	1.9046	1.0000	1.0000	1.0000	1.0000
2011	1.2813	1.1589	1.1589	1.2988	1.7631	1.0000	1.0000	1.0000	1.0000
2012	1.2382	1.1356	1.1356	1.0000	1.6289	1.0000	1.0000	1.0000	1.0000
2013	1.1966	1.1127	1.1127	1.0000	1.5060	1.0000	1.0000	1.0000	1.0000
2014	1.1564	1.0904	1.0904	1.0000	1.3937	1.0000	1.0000	1.0000	1.0000
2015	1.1175	1.0683	1.0683	1.0000	1.2893	1.0000	1.0000	1.0000	1.0000

	TPL (indivisible)	Medical Expenses	Disability Income	Death Benefits	Funeral Expenses	Supp. AccBen	All Perils	Total
1	[44]	[45]	[46]	[47]	[48]	[49]	[50]	[51]
	=[27], [@ proj date]/AY	=[28], [@ proj date]/AY	=[29], [@ proj date]/AY	=[30], [@ proj date]/AY	=[31], [@ proj date]/AY	=[32], [@ proj date]/AY	=[33], [@ proj date]/AY	=[34], [@ proj date]/AY
٦	1.4590	-	=	-	-	=.	1.0000	1.4790
ı	1.4150	-	=	-	-	-	1.0000	1.4425
ı	1.3722	-	=	-	-	-	1.0000	1.4090
١	1.3307	-	=	-	-	-	1.0000	1.3683
ı	1.2904	-	=	-	-	-	1.0000	1.3229
ı	1.2513	-	=	-	-	-	1.0000	1.2721
ı	1.2134	-	=	-	-	-	1.0000	1.2221
ı	1.1765	-	=	-	-	-	1.0000	1.1802
ı	1.1407	-	=	-	-	-	1.0000	1.1382
ı	1.1060	-	-	-	-	-	1.0000	1.0965

Exh D-5b Page 2 of 2 Facility Association Residual Market (FARM) Jurisidiction: Newfoundland & Labrador

Vehicle Type: Taxi

Project ID: NL-2016Q4-TX

Exh E-1

jurisdiction (short form): NL major rating class: PUB minor rating class: TX

Exh E-1 Page 1 of 2

rating type: all

Calculation of Credibility Assigned to Facility Association Experience

as at: 31-Dec-2015

Calculation	or creationity	Assigned to re	acility Associ	ation Expen	CIICE			as at.	31-Dec-2013
	Accident Year	Earned Exposure (excl trailers)	Accident Year Weight	Recorded Claim Count	FA Claim Dev. Factor	Ultimate Claim Count	Adjusted Claim Count	Full Credibility Standard	Credibility
		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
		FA AIX	Exh D-1, col [18]	FA AIX	=Exh E-2, Section C	=[3]*[4]	=0 where [2]=0, otherwise [5]	judgement	=min(100%, [6]/[7]^(1/2))
TPL (indivisible)									
TPL (indivis)	2006	573	-	103	1.0000	103	-		
	2007	663	-	131	1.0000	131	-		
	2008	725	-	118	1.0000	118	-		
	2009	764	-	133	1.0000	133	-		
	2010	780	-	128	1.0000	128	-		
	2011	793	20.0%	164	1.0000	164	164		
	2012	816	20.0%	153	0.9958	152	152		
	2013	852	20.0%	138	0.9949	137	137		
	2014	820	20.0%	173	0.9939	172	172		
	2015	795	20.0%	168	1.0758	181	181		
	Total/Wtd Avg.	7,581	100.00%	1,409		1,419	806	3,246	49.8%
AccBen (indivisi	ble)								
AccBen (indivis)		414	-	34	1.0000		-		
	2007	457	-	22	1.0000	22	-		
	2008	519	-	41	1.0000	41	-		
	2009	553	-	37	1.0000	37	-		
	2010	582	-	26	1.0000	26	-		
	2011	611	20.0%	48	1.0000	48	48		
	2012	639	20.0%	42	1.0000	42	42		
	2013	693	20.0%	44	0.9806	43	43		
	2014	682	20.0%	45	0.9248	42	42		
	2015	675	20.0%	50	1.0191		51		
	Total/Wtd Avg.	5,825	100.00%	389		386	226	2,164	32.3%
Uninsured Auto	mobile								
UA	2006	570	-	7	1.0000	7	-		
	2007	662	-	5	1.0000	5	-		
	2008	719	-	3	1.0000	3	-		
	2009	758	-	8	1.0000	8	-		
	2010	776	-	5	1.0000	5	-		
	2011	793	20.0%	5	0.9981	5	5		
	2012	816	20.0%	3	0.9902		3		
	2013	854	20.0%	8	0.8699	7	7		
	2014	826	20.0%	8	0.9753	8	8		
	2015	804	20.0%	4	0.6964	3	3		
	Total/Wtd Avg.	7,578	100.00%	56		54	26	2,164	11.0%

Facility Association Residual Market (FARM) Jurisidiction: Newfoundland & Labrador

Vehicle Type: Taxi

Exh E-1

Project ID: NL-2016Q4-TX

jurisdiction (short form): NL major rating class: PUB minor rating class: TX

Exh E-1 Page 2 of 2

rating type: all

Calculation of Credibility Assigned to Facility Association Experience

as at: 31-Dec-2015

	· • · • · • · • · · · · · · · · · · · ·	<u></u>	,						
	Accident Year	Earned Exposure (excl trailers)	Accident Year Weight	Recorded Claim Count	FA Claim Dev. Factor	Ultimate Claim Count	Adjusted Claim Count	Full Credibility Standard	Credibility
		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
		FA AIX	Exh D-1, col [18]	FA AIX	=Exh E-2, Section C	=[3]*[4]	=0 where [2]=0, otherwise [5]	judgement	=min(100%, [6]/[7]^(1/2))
Collision	_	-							
CL	2006	27	-	1	1.0000	1	-		
	2007	24	-	2	1.0000	2	-		
	2008	27	-	3	1.0000	3	-		
	2009	21	-	1	1.0000	1	-		
	2010	28	-	2	1.0000	2	-		
	2011	36	20.0%	2	1.0000	2	2		
	2012	46	20.0%	6	1.0000	6	6		
	2013	49	20.0%	7	1.0000	7	7		
	2014	51	20.0%	7	1.0000	7	7		
	2015	64	20.0%	20	0.9774	20	20		
	Total/Wtd Avg.	373	100.00%	51		51	42	1,082	19.7%
Comp									
CM	2006	51	-	1	1.0000	1	-		
	2007	49	-	6	1.0000	6	-		
	2008	46	-	1	1.0000	1	-		
	2009	52	-	3	1.0000	3	-		
	2010	62	-	3	1.0000	3	-		
	2011	67	20.0%	4	1.0000	4	4		
	2012	79	20.0%	7	1.0000	7	7		
	2013	100	20.0%	8	1.0000	8	8		
	2014	115	20.0%	8	1.0000	8	8		
	2015	127	20.0%	7	0.9584	7	7		
	Total/Wtd Avg.	748	100.00%	48		48	34	1,082	17.7%
Specified Peri									
SP	2006	164	-	1	1.0000	1	-		
	2007	224	-	2	1.0000	2	-		
	2008	219	-	2	1.0000	2	-		
	2009	254	-	3	1.0000	3	-		
	2010	249	-	2	1.0000	2	-		
	2011	241	20.0%	1	1.0000	1	1		
	2012	235	20.0%	4	1.0000	4	4		
	2013	231	20.0%	3	1.0000	3	3		
	2014	220	20.0%	-	1.0000	-	-		
	2015	227	20.0%	1	1.0000	1	1		
	Total/Wtd Avg.	2,264	100.00%	19		19	9	1,082	9.1%

Exh E-2 Page 1 of 1

Facility Association Residual Market (FARM) Jurisidiction: Newfoundland & Labrador Vehicle Type: Taxi Project ID: NL-2016Q4-TX

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

Exh E-2

Marche M	Claim Count	Development	Factors		Val Market:	FARM		Val Jurisdiction:	NL	Val Rı	ısiness Segment:	non-PPV						
Accident Year Pooling Vigory Property Property		•		mate Claim Cou				· a. Jurisuiction.		varbu	omess segment.							
Accident volume Part Basin Prince Basin Pri	as at.	30 3411 2010	A. Sciected Oil		ant by willion co							1						
2016 C2 FAMN		Accident Year	Bodily Injury		DCPD				Death Benefits		Supp. AccBen				Collision	Comp	Specified Perils	All Perils
Valuation Valu			[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]
Valuation Valu												2016 Q2 FARM						
2006						=sum([1]to[3])												
2007			valuation	valuation	valuation		valuation	valuation	valuation	valuation	valuation	sum([5]to[9])	valuation	valuation	valuation	valuation	valuation	1/3*[14])
2008					-								7	-				7
2009		2007			-								6	-				-
2010 66		2008			-								7	-				
2011 75 166 - 221 - 22		2009		128	-								9	-				
2012 88 148 236 156 237 156 238 238 238		2010		124	-	190							6	1				
2013 71 125 136 138 139 132 233 131 135 132 233 132		2011	75	166	-	241							7	-				7
2014 73 159 159 233 159 159 233 159 159 233 159 159 159 150		2012	88	148	-	236						59	3	-				6
2015 72 161 70 70 70 70 70 70 70 7		2013	71	125	-	196							8	-	20	27	7 7	3
Academ Year Registration Substitution Sub		2014	73	159	-	233						55	9	-	16	20) 4	6
Accident Year Poperty Property Property Property (indivisible) Expenses		2015	72	161	-	233						70	5	-	30	19	9 6	7
Accident Year Poperty Property Property Property (indivisible) Expenses	diagonal:	31-Dec-2015	B. LTD Recorde	d Claim Count b	y Minor Covera	ge Type												
Account variety Solitory Impure Destroy Impure Supplication Supplic	•						Medical	Disability		Funeral		AccBen	Uninsured	Underinsured				
		Accident Year	Bodily Injury		DCPD		Expenses		Death Benefits		Supp. AccBen	(indivisible)	Automobile		Collision	Comp	Specified Perils	All Perils
2015 Q4 FARM 201			[17]		[19]	[20]	[21]		[23]	[24]	[25]		[27]	[28]	[29]	[30]	[31]	[32]
Data																		
2006																		
2007			Data	Data	Data	[19])	Data	Data	Data	Data	Data	sum([21]to[25]	Data	Data	Data	Data	Data	1/3*[30])
2007		2006	49	111	-	160	32	12			_	1 44	7		11	17	7 7	7
2008					_					1	_			_				
2009					_					_	_		-	1				-
2010					_				_		_							
2011 75 166 - 241 52 15 - 1 - 68 7 - 15 28 7 7 7 7 7 7 7 7 7					_				1	1			_	1				
2012 89 148 - 237 45 14 - - - 59 3 - 20 21 12 66									-				-	-		-		
2013 71 126 197 51 9 1 1 62 9 20 27 7 3 3 2014 74 160 234 46 12 2 60 9 16 20 4 6 7 7 20 6 7 7 20 6 7 7 20 6 7 7 20 6 7 7 20 7 20 6 7 7 20 7 20 6 7 20 7 20 7 20 7 20 7 20 7 20 20					-				-	1	-		,	-				
2014 74 160 - 234 46 12 - 2 - 60 9 - 16 20 4 66 66 7					-				- 4		-		-	-				
Complied Clair Count Development Factor (COUF) Count Development Factor (Count					-				1	_	-		-	-				
Accident Year Format For					-				-		-		-	-				
Accident Year Bodily Injury Property Damage DCPD Damage TPL (indivisible) Expenses Damage Expenses Damage DCPD Damage Expenses DCPD Damage DCPD Damage Expenses DCPD Damage DCPD Dam		2015		151	-	217	30	12	-	1	=	69	,	-	31	20	5 6	
Accident Year Bodily Injury Damage DPD (Indivisible) Expenses Income Death Benefits Expenses Supp. Accident Supp. Supp. Accident Supp. Accid			C. Implied Clair	n Count Develo	pment Factor (C	CDF)												
Sample Compute Compu				Property		TPL	Medical	Disability		Funeral		AccBen	Uninsured	Underinsured				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		Accident Year	Bodily Injury	Damage	DCPD	(indivisible)	Expenses	Income	Death Benefits	Expenses	Supp. AccBen	(indivisible)	Automobile	Motorist	Collision	Comp	Specified Perils	All Perils
$\frac{7]-0],[36],[1]/[8]-0],[36],[2]/[9]-0],[36],[3]/[8]}{17]} 8] 9] 1000 1,0000 1,$			[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	[47]	[48]
$\frac{7]-0],[36],[1]/[8]-0],[36],[2]/[9]-0],[36],[3]/[8]}{17]} 8] 9] 1000 1,0000 1,$			=if(or([5]=0,[1	=if(or([5]=0,[1	=if(or([5]=0,[1		=if(or([5]=0,[2	=if(or([5]=0,[2	=if(or([5]=0,[2	=if(or([5]=0,[2	=if(or([5]=0,[2							
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$						=[4]/[20]						=[10]/[26]			=[13]/[29]	=[14]/[30]	=[15]/[31]	=[16]/[32]
2006 1.0000 1.0													[11]/[27])	[12]/[28])				
2007 1.0000 1.0		2006			1.0000	1.0000					1,0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2008 1.0000 <td></td> <td>1.0000</td>																		1.0000
2009 1.0000 <td></td> <td>1.0000</td>																		1.0000
2010 1.0000 <td></td>																		
2011 1.0000																		
2012 0.9888 1.0000 0.9958 0.9958 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.9902 0.9888 1.0000 1.0000 1.0000 1.0000 2013 1.0000 0.9921 0.9949 0.9949 0.9806 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>																		
2013 1.0000 0.9921 0.9949 0.9949 0.9806 0.9806 0.9806 0.9806 0.9806 0.9806 0.9806 0.8699 1.0000																		
2014 0.9910 0.9952 0.9939 0.9939 0.9248 0.9248 0.9248 0.9248 0.9248 0.9248 0.925 0.9248 0.975 0.9910 1.0000 1.0000 1.0000 1.0000																		
																		0.9929

Facility Association Residual Market (FARM)
Jurisidiction: Newfoundland & Labrador

jurisdiction (short form): NL major rating class: PUB

Vehicle Type: Taxi

minor rating class: TX rating type: all

Project ID: NL-2016Q4-TX Exh F-1

Interest Rate Selection for Discount and Cost of Capital Calculations Based on Canadian Treasury and Canada Bonds Yields

	Historical Yields								
Year	91-day	1-3 yr	3-5 yr	5-10 yr	10+ yr				
	[1]	[2]	[3]	[4]	[5]				
2006	4.10	4.07	4.10	4.18	4.30				
2007	4.22	4.22	4.21	4.25	4.34				
2008	2.41	2.66	2.96	3.36	4.04				
2009	0.35	1.21	2.15	2.84	3.89				
2010	0.60	1.48	2.21	2.88	3.66				
2011	0.92	1.38	1.85	2.47	3.21				
2012	0.98	1.12	1.30	1.63	2.33				
2013	0.97	1.12	1.48	1.99	2.72				
2014	0.91	1.05	1.38	1.87	2.60				
2015	0.50	0.53	0.66	1.19	2.02				
5-yr avg									
2006-2010	2.34	2.73	3.13	3.50	4.05				
2011-2015	0.86	1.04	1.33	1.83	2.58				
5-yr std dev									
2006-2010	1.85	1.40	0.99	0.68	0.28				
2011-2015	0.20	0.31	0.43	0.47	0.45				

Above from the Canadian Institute of Actuary

Report on Canadian Economic Statistics, 1924-2015, Table 4A

Current Risk Free Yield	ds (basis points)					wgted avg
10/31/2016	0.50	0.56	0.62	0.94	1.68	0.62
weights:	9.0%	49.0%	29.0%	13.0%	0.0%	
avg maturity:	3.2 years	(weig	ghted based on clain	ns payment patterns		
	580	3,307	1,942	907	23	6,759
BoC at 2016-10-31 htt	n://www.bankofcanad	la ca/rates/inter	est-rates			

Selected Gross Yield: 0.62%

Investment Expenses (rounded): 0.15% Selected Net Yield: 0.47% Exh F-1 Page 1 of 1

Jurisidiction: Newfoundland & Labrador

Vehicle Type: Taxi

Project ID: NL-2016Q4-TX

Exh F-2

Present Value Factors - Claim Amounts - Facility Association

Discount Rate 0.47%

jurisdiction (short form): NL major rating class: PUB minor rating class: TX

rating type: all

Page 1 of 2

Exh F-2

Accident Year Estimated Payment Pattern by Development Age	Val Market: FARM	Val Jurisdiction: NL	Val Business Segment: non-PPV	as at: Jun 30, 2016

	ar Estimate.	,		Developine		vai iviai keei			- u. susu.c			пева вевинения				us ut.	3011 50, 201
Development Age	Bodily Injury	Property Damage	DCPD	TPL (indivisible)	Medical Expenses	Disability Income	Death Benefits	Funeral Expenses	Supp. AccBen	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils	All Perils	Present Value Factor
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[15]
	Emergence Model Output	=[10]	=[1]	Emergence Model Output	Emergence Model Output	=[14]	=[13]	=(1+[dsct rate])^{-1* ([dev'l age]- 6)/12}									
12	1.5%	61.7%	100.0%	8.9%	100.0%	100.0%	100.0%	100.0%	100.0%	17.4%	17.4%	1.5%	96.8%	88.9%	88.9%	96.8%	0.9977
24	14.3%	32.7%	-	16.5%	-	-	-	-	-	34.8%	34.8%	14.3%	3.2%	11.1%	11.1%	3.2%	0.9930
36	27.9%	3.4%	-	24.9%	-	-	-	-	-	24.8%	24.8%	27.9%	-	-	-	-	0.9883
48	25.3%	0.5%	-	22.3%	-	-	-	-	-	9.0%	9.0%	25.3%	-	-	-	-	0.9837
60	12.8%	0.5%	-	11.3%	-	-	-	-	-	9.0%	9.0%	12.8%	-	-	-	-	0.9791
72	5.3%	0.5%	-	4.7%	-	-	-	-	-	2.6%	2.6%	5.3%	-	-	-	-	0.9745
84	7.7%	0.5%	-	6.8%	-	-	-	-	-	1.2%	1.2%	7.7%	-	-	-	-	0.9700
96	4.3%	0.2%	-	3.8%	-	-	-	-	-	1.2%	1.2%	4.3%	-	-	-	-	0.9654
108	0.8%	-	-	0.7%	-	-	-	-	-	-	-	0.8%	-	-	-	-	0.9609
120	0.1%	-	-	0.1%	-	-	-	-	-	-	-	0.1%	-	-	-	-	0.9564
132	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9520
144	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9475
156	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9431
168	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9387
180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9343
192	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9299
204	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9255
216	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9212
228	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9169
240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9126
252	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9084
264	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9041
276	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8999
288	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8957
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Jurisidiction: Newfoundland & Labrador

Vehicle Type: Taxi

Project ID: NL-2016Q4-TX

Exh F-2

Present Value Factors - Claim Amounts - Facility Association

Discount Rate 0.47%

Policy Year Estimated Payment Pattern by Development Age

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

Exh F-2 Page 2 of 2

Development Age	Bodily Injury	Property Damage	DCPD	TPL (indivisible)	Medical Expenses	Disability Income	Death Benefits	Funeral Expenses	Supp. AccBen	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils	All Perils	Present Valu Factor
	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	[30] =(1+[dsct
	average of AY a	verage of AY	average of AY	average of AY	average of AY	average of AY	average of AY	average of AY	average of AY	average of AY	average of AY	average of AY	average of AY	average of AY	average of AY	average of AY	
	% by age	% by age	% by age	% by age	% by age	% by age	% by age	% by age	% by age	% by age	% by age	% by age	% by age	% by age	% by age	% by age	([dev'l age]-
	, 0	, 0	, 0	, 0	, 0	, 0	, 0	, 0	, 0	, 0	, 0	, 0	, 0	, 0	, 0	, 0	6)/12}
12	0.5%	30.7%	50.0%	4.3%	50.0%	50.0%	50.0%	50.0%	50.0%	8.7%	8.7%	0.5%	48.4%	44.4%	44.4%	48.4%	0.997
24	7.9%	47.2%	50.0%	12.7%	50.0%	50.0%	50.0%	50.0%	50.0%	26.1%	26.1%	7.9%	50.0%	50.0%	50.0%	50.0%	0.9930
36	21.1%	18.1%	-	20.7%	-	-	-	-	-	29.8%	29.8%	21.1%	1.6%	5.6%	5.6%	1.6%	0.9883
48	26.6%	2.0%	-	23.6%	-	-	-	-	-	16.9%	16.9%	26.6%	-	-	-	-	0.9837
60	19.1%	0.5%	-	16.8%	-	-	-	-	-	9.0%	9.0%	19.1%	-	-	-	-	0.9791
72	9.1%	0.5%	-	8.0%	-	-	-	-	-	5.8%	5.8%	9.1%	-	-	-	-	0.9745
84	6.5%	0.5%	-	5.8%	-	-	-	-	-	1.9%	1.9%	6.5%	-	-	-	-	0.9700
96	6.0%	0.4%	-	5.3%	-	-	-	-	-	1.2%	1.2%	6.0%	-	-	-	-	0.9654
108	2.6%	0.1%	-	2.3%	-	-	-	-	-	0.6%	0.6%	2.6%	-	-	-	-	0.9609
120	0.5%	-	-	0.4%	-	-	-	-	-	-	-	0.5%	-	-	-	-	0.9564
132	0.1%	-	-	0.1%	-	-	-	-	-	-	-	0.1%	-	-	-	-	0.9520
144	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9475
156	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9431
168	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9387
180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9343
192	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9299
204	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9255
216	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9212
228	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9169
240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9126
252	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9084
264	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.9041
276	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8999
288	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8957
300	-	-	-	-	-	-	-	-	-	-	-	-	-	<u> </u>	-	-	0.8915
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
V factor	0.9810	0.9930	0.9954	0.9825	0.9954	0.9954	0.9954	0.9954	0.9954	0.9872	0.9872	0.9810	0.9952	0.9948	0.9948	0.9952	

Jurisidiction: Newfoundland & Labrador

Vehicle Type: Taxi

Project ID: NL-2016Q4-TX

Exh G-1

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

minor rating class: TX rating type: all

Development of Present Value Factors - Premium and Expense Assuming 0.47% Annual Rate of Return

	-	ı	Percentage of Premiur	n	=	
	-	Nominal	Discount Factor	Discounted	-	
		[A]	[B]	[C]		
_				=[A]*[B]		
Revenue [1]	Premium	100.00	0.9994	99.94	assumed collection delay, in mths: 1.6 based on the premium	lag analysis
[2]	Finance Fee	100.00	0.9994	99.94	n/a 1.6 Joased on the premium	iag arialysis
[3]	Total Revenue	100.00	0.5551	99.94	=[1]+[2]	
Effective Co [4]	mmission Ratios estimated @ current rates	6.00	0.9994	6.00	Exh G-2 row [3]	
[4] [5]	at indicated target rate change	6.00	0.9994	6.00	· ·	C 2 row [2]
[6]	at indicated target rate change at indicated rate change & alternate target	6.00	0.9994	6.00	,	
[7]	at proposed rates	6.00	0.9994	6.00	,	
[7]	at proposed rates	0.00	0.5554	0.00	- Okay Verifies Commission ratio correct with EARLY	0-2 10W [3]
Premium Va	riable Expenses, premium tax and S.C. non-claims fees					
[8]	Premium tax	5.00	0.9994	5.00	Premium and Fire Tax Rate - 2016 (per IBC legal bulletin)	
[9]	Servicing carrier operating cost	9.00	0.9994	8.99	Plan of Operation, Article IX, 2(a)	
[10]	Servicing carrier fees	1.00	0.9994	1.00	Plan of Operation, Article IX, 2(a)	
[11]	Premium finance admin expenses	-	0.9994	-	n/a	
[12]	GISA Levy (% of ALL COVERAGES premium)	0.06	0.9994	0.06	=[33]	
[13]	Rate Regulatory Levy (where it is % of ALL COVERAGES	0.13	0.9994	0.13	=[36]	
	premium)					
[14]	Health Levy (where it is % of ALL COVERAGES premium)		0.9994	-		
					_as applicable	
[15]	Total Premium Variable Expenses, premium tax and S.C. non-	15.19		15.18	=sum of rows [8] thru [14]	
	claims fees, other than TPL				-	
[16]	Health Levy (where it is % of TPL ONLY)		0.9994	_	as applicable	
[17]	Total Premium Variable Expenses, premium tax and S.C. non-	15.19	0.555		=[15]+[16]	
(17)	claims fees, TPL ONLY	13.13		13.10	[25].[25]	
					-	
	riable Expenses, Servicing Carrier Initial Claims Fee					
[18]	Servicing carrier claims fee reimbursement ratio	10.00	0.9953	9.95	Accounting & Statistical Manual, Chapter 7.4 avg	g earned mth: 12
Fixed Expen	50					
[19]	Bad Debt	-	0.9994	_	per FA finance	
[20]	Central Office	2.50	0.9994	2.50	Exh G-2 row [7]	
[21]	Total Fixed Expense (used directly for other than TPL)	2.50			=[19]+[20]	
	· · · · · · · · · · · · · · · · · · ·				-	
[22]	TPL Written Exposures	782			Exh C-2 row [17]	
[23]	On-level TPL Written Premium (\$1s)	4,059,616			Exh C-2 row [29]	
[24]	Deliver Donard All streets	60.60			Deliver Decord Abstracts Apolisis	
[24]	Driver Record Abstracts	69.69			Driver Record Abstracts Analysis	
[25]	Driver Record Abstracts Cost (total in \$s)	54,480	0.0004	4.34	=[22]*[24] =100*[35]/(23]	
[26]	Driver Record Abstracts as % of premium	1.34	0.9994	1.34	=100*[25]/[23]	
[27]	Health Levy per earned vehicle				Health Levy Analysis	
[28]	Health Levy Cost (total in \$s)	-			=[22]*[27]	
[29]	Health Levy (where it is per vehicle), as % of premium	_	0.9994	_	=100*[28]/[23]	
[30]	Total Fixed Expense (used directly for TPL ONLY)	3.84		3.84	=[21]+[26]+[29]	
					-	
	GISA and Rate Regulator Levies				T. 15 () 0 0100111 10	
[31]	GISA Cost	10,463,846			Total Expense from the GISA 2014 Annual Directors Report	2014 Industry Alice Alice
[32]	Industry Annual Written Premium (\$1,000s)	17,599,280	0.0004	0.00	2014 Industry AU11 AIX (Country-wide)	2014 Industry AU11 AIX
[33]	GISA Levy as % of premium	0.06	0.9994	0.06	_=100*[31]/[32]	Written Premium (\$000s) TOTAL 17,599,280
[34]	Pata Pagulator Annual Industry Loss Cost (tatal in Ca)	507,748			2014-2015 Annual Report - NLPUB	TOTAL 17,599,280 ON 12,149,838
[34]	Rate Regulator Annual Industry Levy Cost (total in \$s) Industry Annual Written Premium (\$1,000s)	396,353			2014-2015 Annual Report - NLPOB 2014 Industry AU11 AIX (NL)	AB 3,944,474
[36]	Rate Regulator Levy as % of premium	0.13	0.9994	Λ 12	=100*[34]/[35]	AB 3,944,474 Atlantics 1,446,229
[30]	nate negulator Levy as 70 or premium	0.13	0.9994	0.13	-100 [24]/[23]	Augitus 1,440,229

Exh G-1

Page 1 of 1

business segment: N

Facility Association Residual Market (FARM) Jurisidiction: Newfoundland & Labrador Vehicle Type: Taxi

Project ID: NL-2016Q4-TX

Exh G-2

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all Exh G-2 Page 1 of 1

Expense Assumptions - Selections jurisdiction code: 075

			2015	2014	2013	2012	2011	Total	Last 3 complete L Years	ast 2 complete Years	Selected	
[1]	Written Premium	Participation Rpt	6,687,052	6,452,306	6,376,174	5,681,761	5,570,217	30,767,510	19,515,532	13,139,358		
[2]	Agents Commissions	Participation Rpt	491,707	479,481	483,176	432,985	432,799	2,320,148	1,454,364	971,188		
[3]	Agents Commissions as a % of Premium	=[2]/[1]	7.35%	7.43%	7.58%	7.62%	7.77%	7.54%	7.45%	7.39%	6.00%	plan of operation, wghted avg
[4]	On-level to current rates	Exh D-3b, col [49]	1.9640	2.0930	2.6203	3.1711	3.1464					
[5]	On-level Written Premium	=[1]*[4]	13,133,370	13,504,676	16,707,489	18,017,432	17,526,131	78,889,098	43,345,535	26,638,046		
[6]	Administration Expense	Participation Rpt	185,332	147,014	131,299	112,878	183,385	759,908	463,645	332,346		
[7]	Administration Expense as a % of On-level W Premium	=[6]/[5]	2.77%	2.28%	2.06%	1.99%	3.29%	2.47%	2.38%	2.53%	2.50%	Last 2 complete Years, rounded

Non-PPV AY Written Premium by Minor Rating Class

AU11 Data	Market: FA	Ą			
as at:	2015	2014	2013	2012	2011
12/31/2015 CV	1,132,651	1,146,357	1,154,637	1,225,112	1,231,562
IU	456,939	453,164	563,521	426,249	532,627
PuBus	335,996	335,504	332,452	284,681	267,866
PrBus-STR-MPA	88,158	132,473	173,447	141,425	109,257
SBus	331,965	242,613	265,995	228,486	212,223
HCCBus	15,423	11,319	14,315	20,034	21,465
TX	2,513,470	2,395,383	2,152,409	1,697,835	1,622,195
FU	-	-	-	-	-
AM	15,853	12,486	34,740	37,522	38,628
MC	1,099,578	1,092,232	1,097,747	1,049,039	962,073
ATV	213,672	196,304	166,018	144,215	106,045
SV	94,922	95,124	89,577	82,670	79,946
HV	2,961	2,111	1,677	1,861	1,976
MH	21,383	15,254	19,616	25,778	19,076
TH	1,095	1,197	1,026	5,718	10,347
GA	309,241	244,074	253,814	266,512	287,247
NO	581	1,713	1,458	1,951	2,543
DP	1,606	-	1,388	-	50
Total	6,635,494	6,377,308	6,323,837	5,639,088	5,505,126

2015			commission r	atio
Individual	Fleet	Individual	Fleet	weighted
1,084,584	48,067	10.0%	7.5%	9.9%
409,730	47,209	6.0%	6.0%	6.0%
192,355	143,641	6.0%	6.0%	6.0%
88,718	(560)	10.0%	7.5%	10.0%
89,704	242,261	10.0%	7.5%	8.2%
15,423	-	10.0%	7.5%	10.0%
2,060,675	452,795	6.0%	6.0%	6.0%
-	-	10.0%	7.5%	10.0%
15,853	-	10.0%	7.5%	10.0%
1,099,578	-	7.5%	7.5%	7.5%
213,672	-	7.5%	7.5%	7.5%
94,922	-	7.5%	7.5%	7.5%
2,961	-	11.0%	7.5%	11.0%
21,383	-	11.0%	7.5%	11.0%
1,095	-	11.0%	7.5%	11.0%
309,241	-	10.0%	7.5%	10.0%
581	-	10.0%	7.5%	10.0%
1,606	-	10.0%	7.5%	10.0%
5,702,081	933,413			

Jurisidiction: Newfoundland & Labrador

Vehicle Type: Taxi

Project ID: NL-2016Q4-TX

Exh H-1

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all Exh H-1 Page 1 of 1

Target Return & Alternate Return Assumptions

Assumption		Selected	Source / Formula
-	rn & Capital Level		
[1]	Target after-tax ROE	12.0%	as directed by FA Board of Directors
[2]	Target Leverage Ratio (i.e. premium to equity)	2.00	actuarial assumption
ncome Tax			
[3]	corporate income tax rate	30.0%	PwC Insurance Industry Key tax rates and updates (2016-06)
[4]	net-of-income tax factor	70.0%	=100%-[3]
nvestment	Return		
[5]	pre-tax investment return	0.47%	Exh F-1
[6]	after-tax investment return	0.33%	=[4]*[5]
/ariable exp	ense ratio		
[7]	variable expense ratio (discounted) - TPL	15.18%	Exh G-1, row [17] column [C]
[8]	Target weight - TPL	6,447,580	Exh C-1, for TPL - row [4] *(1+row[[22])
[9]	variable expense ratio (discounted) - other than TPL	15.18%	Exh G-1, row [15] column [C]
[10]	Target weight - other than TPL	837,168	Exh C-1, other than TPL - row [4] *(1+row[[22])
[11]	variable expense ratio (discounted) - all coverage weighted basis	15.18%	=([7]*[8]+[9]*[10])/([8]+[10])
[12]	net-of-variable expense factor	84.82%	=100%-[11]
Calculations			
[13]	Target pre-tax ROE	17.14%	=[1]/[4]
[14]	return required from operations (underwriting and investment income on	16.67%	=[13]-[5]
	policyholder funds) as a percentage of equity to meet Target pre-tax ROE		
[15]	Target Return on Premium (i.e. pre-tax return from underwriting, including	8.34%	=[14]/[2]
	associated investment income, as % of premium)		
ndication A	Iternate to be based on:		
[16]	Cost of Capital	0.00%	
			as selected (or through default); after-tax othe
			than Return on Premium (which is pre-tax)
[17]	implied Alternate basis Leverage Ratio (i.e. premium to equity)	1.80	=[2]-([1]-([16]+[6]))/([12]*[4])
[18]	Alternate basis after-tax ROE	0.33%	=[16]+[6]
[19]	Alternate basis pre-tax ROE	0.47%	=[18]/[4]
[20]	return required from operations (underwriting and investment income on	0.00%	=[19]-[5]
	policyholder funds) as a percentage of equity to meet Alternate basis pre-tax ROE		
[21]	Alternate basis Return on Premium (i.e. pre-tax return from underwriting,	0.00%	=[20]/[17]
	including associated investment income, as % of premium)		



Indication Exhibits – Alternative Assumptions

Project ID: NL-2016Q4-TX

Exh A-1

dcst rate: 2.80% jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all Exh A-1 Page 1 of 1

Analysis Summary (NB eff 1-Oct-2017; RN eff 1-Oct-2017)			Bodily Injury	Property Damage	DCPD	TPL (indivisible)	Accident Benefits	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils	All Perils	TOTAL
Indication Summary														
FA Average Written Premium, Rolling 12, \$s	Exh C-1, row [3]	2,917	-	-	-	2,917	104	29	-	1,030	336	5 118	1,388	3,204
Indicated target rate change (12.0% ROE, leverage 2.0)	Exh C-1, row [22]	44.5%	44.5%	44.5%	44.5%	44.5%	35.8%	69.9%	-	0.3%	(2.4%	5) 2.9%	(3.4%)	43.4%
AWP dollar change for Indicated target rate change (12.0% ROE, leverage 2.0) Exh C-1, row [24]		2,318	-	-	-	2,318	163	123	-	2	(8	3) 5	(40)	2,574
Indicated Average Written Premium		5,235	-	-	-	5,235	267	152	-	1,032	328	123	1,348	5,778
Rate change selected by FA	Exh C-1, row [35]	_	30.7%	30.7%	30.7%	30.7%	22.8%	53.7%	-	(9.3%)	(11.8%	5) (7.0%)	(12.7%)	29.7%
FA Assumptions except Rol; Alternate rate change	basis (0.0% Cost of Capital, lev	erage 1.80), Ro	at 2.8% (NL PUB	minimum)										
AWP dollar change for Rate change selected by FA	Exh C-1, row [37]	-	-	-	-	1,599	104	95	-	(74)	(40) (12)	(148)	1,762
Selected Average Written Premium		2,917	-	-	-	4,516	208	124	-	956	296	106	1,240	4,966
Alternate rate change basis (0.0% Cost of Capital, leverage 1.83)	Exh C-1, row [30]	30.7%	30.7%	30.7%	30.7%	30.7%	22.8%	53.7%	-	(9.3%)	(11.8%	5) (7.0%)	(12.7%)	29.7%
AWP dollar change for Alternate rate change basis (0.0% Cost of Capital, levera Exh C-1, row [32]		1,599	-	-	-	1,599	104	95	-	(74)	(40) (12)	(148)	1,762
Average Written Premium @ Alternate Return Assumption capped		4,516	-	-	-	4,516	208	124	-	956	296	106	1,240	4,966
Prior Indication, filed changes, and approved changes														
Indicated Rate Change (12% ROE)		79.7%	79.7%	79.7%	79.7%	79.7%	92.0%	115.3%	-	(3.9%)	10.5%	16.7%	3.9%	79.6%
Filed Rate Change		24.6%	24.6%	24.6%	24.6%	24.6%	42.2%	50.9%		(9.4%)	(2.0%	5) (1.3%)	(6.9%)	25.7%
Approved Effective Date: Mar 1, 2017 (NB & RN) - major rate change			24.6%	24.6%	24.6%	24.6%	42.2%	50.9%		(9.4%)	(2.0%	(1.3%)	(6.9%)	25.7%

Jurisidiction: Newfoundland & Labrador Vehicle Type: Taxi

Project ID: NL-2016Q4-TX

Exh B-1

jurisdiction (short form): NL major rating class: PUB minor rating class: TX

rating type: all

Exh B-1

Page 1 of 1

Rate Program Parameters

A. In relation to	Current	("Expiring")	Rates
-------------------	---------	--------------	-------

estimated from prior analysis estimated average written date, prior analysis: 01-Apr-2017 [1]

estimated premium trend period (days) between analyses: 365 [2] = [8]-[1]

estimated average accident date, prior analysis: 30-Sep-2017 [3] estimated from prior analysis

estimated claims trend period (days) between analyses: = [12]-[3] 365 [4]

B. Proposed Rate Program Effective Dates and # Months in effect

average new business renewals FA download facility (weighted avg 2011-2013 pol % split 14.1% 85.9% [5]

assumption, with average based on [5] rate program effective dates 01-Oct-2017 01-Oct-2017 01-Oct-2017 [6]

=> generates last effective date for rate program # mths future rates in effect: 12.0 30-Sep-2018 [7]

> average written date in effective period: 01-Apr-2018 [8] = average of [6] & [7]

C. Proposed Rate Program Policy Terms

policy term mths: 6 12 1.0% 99.0% [9] FA download facility % split

first possible accident date: 01-Oct-2017 01-Oct-2017 [10]

last possible accident date: 30-Mar-2019 30-Sep-2019 [11] =[7]+policy term in mths average accident date: 01-Jul-2018 01-Oct-2018 **30-Sep-2018 [12]** = total average based on [9]

D. Rate Analysis Trend Basis

USER TO SELECT BASIS FOR PROJECTED LOSS RATIO FOR CREDIBILITY COMPLEMENT:

Select A or B: where: A FA Selected Trend Models (Exh D-5b)

B Regulatory Benchmark Trends (Exh D-5b (ALT))

Resulting Selection Information:

type: FA Selected market: INDUSTRY rating class: CV

as at: 31-Dec-15

E. Data Summary FA Experience: FA AIX [13] AU11

> as at: 31-Dec-2015 [14]

Loss Development Factors (LDFs): FA non-PPV val data as per FA valuation, FARM [15]

as at: 30-Jun-2016 [16] compared to recorded @ 31-Dec-2015

Claims Development Factors (CDFs): FA non-PPV val data [17] as per FA valuation, FARM as at: 30-Jun-2016 [18] compared to recorded @ 31-Dec-2015

Trends: Industry AIX AU70 as per FA analysis, Industry [19]

as at: 31-Dec-2015 [20]

Exposure & Premium for Drift Calculations: FA apps db, AIX rate group drift from download facility, [21]

31-Dec-2015 [22] limit and ded from AU11 as at:

> Rate Level Factors: FA as per internal records internal [23] as at: 31-Oct-2016 [24] ..\..\..\..\rate changes\FARM\summaries ove

Expenses: FA internal [25] as per Participation Reports at cal year-end

as at: 31-Dec-2015 [26]

Alternative Indications - Page 4 of 34

Facility Association Residual Market (FARM) experience 2006 2011 20.0% RN eff date: Trend Basis Exh C-1 Jurisidiction: Newfoundland & Labrador accident yr 20.0% Oct 1 2017 jurisdiction (short form): NL type: FA Selected Page 1 of 2 2007 Vehicle Type: Taxi 2008 2013 20.0% major rating class: PUB market: INDUSTRY weights Project ID: NL-2016Q4-TX 2009 2014 20.0% rating class: CV used in minor rating class: TX dcst rate: Exh C-1 indications 2010 2015 20.0% 2.80% rating type: all as at: 31-Dec-15

							1			rumb type.					
Derivation	n of Indicated Change in Overall Rate Level		[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[1]	[1]	[K]	[L]	[M]
(\$1	s) unless otherwise indicated		Third Party Liability	Bodily Injury	Property Damage	DCPD	TPL (indivisible)	Accident Benefits	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils	All Perils	TOTAL
acility Assoc	ciation Exposures & Premium	FA AIX as at: Dec 31 2015	Liability		Damage		(IIIdivisible)	benents	Automobile	WOOTISE	 				
[1]	FA Written Exposures, Rolling 12	Exh C-2, row [17]	782	-	_	-	782	673	784		70	121	217	2	7
[2]	FA Written Premium, Rolling 12	Exh C-2, row [20]	2,280,282	-	_	_	2,280,282	69,678	22,902		72,115	40,688	25,632	2,198	2,513,4
[3]	FA Average Written Premium, Rolling 12, \$s	Exh C-2, row [23]	2,917	-	_	_	2,917	104	29		1,030	336	118	1,388	3,2
[4]	FA Written Premium @ Current Rates, Projected to Future Period	Exh C-2, row [34]	4,073,013	-	-		4,073,013	306,114	138,002		55,687	40,784	36,739	1,848	4,652,1
[5]	FA Avg Written Premium @ Current Rates, Projected to Future Period, \$s	Exh C-2, row [35]	5,210	_	_	_	5,210	455	176		796	337	169	1,167	5,9
[6]	Premium distribution @ current rates	([4] by coverage)/([4] total)	87.55%	_	_	_	87.55%	6.58%	2.97%	_	1.20%	0.88%	0.79%	0.04%	100.0
[-]	jected Loss Ratio (indemnity only, nominal) @ Current Rates	([4] by coverage)/([4] total)	87.55%	-			87.55%	0.38%	2.3776		1.20%	0.0070	0.75%	0.0476	100.0
[7]	Updated projected loss ratio (indemnity only, nominal), prior analysis	Exh C-2, row [14]	89.9%	89.9%	89.9%	89.9%	89.9%	83.2%	95.1%		58.1%	62.5%	64.6%	61.2%	88.
	ss Ratio (indemnity only, nominal) based on FA experience	Exile 2, for [14]	03.370	03.370	03.370	03.370	05.570	051270	33.270		50.170	021570	041070	011270	
[8]	FA projected ultimate loss ratio (indemnity only, nominal)	Exh D-1, col [17]	96.9%	96.9%	96.9%	96.9%	96.9%	98.2%	237.1%	-	74.3%	46.6%	48.3%	20.2%	100.
Credibility-W	eighted Projected Loss Ratio (indemnity only, nominal)														
[9]	FA experience credibility	Exh E-1, col [8]		49.8%	49.8%	49.8%	49.8%	32.3%	11.0%	-	19.7%	17.7%	9.1%	5.3%	i
[10]	Credibility-weighted projected Loss Ratio (indeminty only, nominal)	=[8]*[9]+[7]*(1-[9])	93.4%	93.4%	93.4%	93.4%	93.4%	88.0%	110.7%	-	61.3%	59.7%	63.1%	59.0%	92.
rojected Lo	ss Ratio (indemnity & excess legal, discounted @ 2.80%)														
[11]	Loss discount factor	Exh F-2 (re-wghted)	0.9024	0.9024	0.9024	0.9024	0.9024	0.9275	0.9275	0.8943	0.9720	0.9699	0.9699	0.9720	0.90
[12]	Credibility-weighted projected loss ratio (indemnity only, discounted)	=[10]*[11]	84.3%	84.3%	84.3%	84.3%	84.3%	81.6%	102.7%	-	59.6%	57.9%	61.2%	57.3%	83.
[13]	excess legal as % indemnity	see note 3 below	1.6%	1.6%	1.6%	1.6%	1.6%	-							1.
[14]	Cred-wght'd projected loss ratio (indemnity & excess legal, discounted)	=[12]*(1+[13])	85.6%	85.6%	85.6%	85.6%	85.6%	81.6%	102.7%	-	59.6%	57.9%	61.2%	57.3%	85
	Revenue, Expenses and Capital Costs														
[15]	Revenue discount factor	Exh G-1, col[C], row[3]	0.9963	0.9963	0.9963	0.9963	0.9963	0.9963	0.9963	0.9963	0.9963	0.9963	0.9963	0.9963	0.9
[16]	Total discounted fixed expenses, as % of current on-level premium	Exh G-1, col[C], row[30] for TPL, otherwise													1
[20]		row[21]	3.83%	3.83%	3.83%	3.83%	3.83%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	2.49%	3.6
[17]	Discounted effective commission ratio (based on Indicated rate level change)	Exh G-1, col[C], row[5]	5.98%	5.98%	5.98%	5.98%	5.98%	5.98%	5.98%	5.98%	5.98%	5.98%	5.98%	5.98%	5.5
[18]	Total discounted variable expenses prem tax, S.C. non-claims fees, as % of premium	Exh G-1, col[C], row[17] for TPL, otherswise													i
		row[15]	15.14%	15.14%	15.14%	15.14%	15.14%	15.14%	15.14%	15.14%	15.14%	15.14%	15.14%	15.14%	15.1
[19]	Discounted variable S.C. initial claims fee, as % of premium	Exh G-1, col[C], row[18]	9.73%	9.73%	9.73%	9.73%	9.73%	9.73%	9.73%	9.73%	9.73%	9.73%	9.73%	9.73%	9.7
[20]	Retroactive claims fee adjustment (discounted), as % of premium @ target rate	goal seek to 0 on col [L], row [41]	(0.29%)	(0.29%)	(0.29%)	(0.29%)	(0.29%)	(0.29%)	(0.29%)	(0.29%)	(0.29%)	(0.29%)	(0.29%)	(0.29%)	(0.2
[21]	Target Return on Premium (i.e. pre-tax return from underwriting, including associated investment	Exh H-1, row[15]	7.17%	7.17%	7.17%	7.17%	7.17%	7.17%	7.17%	7.17%	7.17%	7.17%	7.17%	7.17%	7.1
Rate Indicati	income, as % of premium)	EXIT H-1, TOW[15]	7.17/6	7.17/0	7.17/0	7.17/6	7.17/6	7.17/0	7.17/0	7.1770	7.17/0	7.17/0	7.17/0	7.17/0	
[22]	Indicated target rate change (12.0% ROE, leverage 2.0)	=([14]+[16])/([15]-[17]-[18]-[19]-[20]-[21])-1	44.5%	44.5%	44.5%	44.5%	44.5%	35.8%	69.9%		0.3%	(2.4%)	2.9%	(3.4%)	43.4
	Avg WP @ Indicated target rate change (12.0% ROE, leverage 2.0)			44.5%	44.5%	44.5%	7,528	618	299	-			174		8,5
[23]	AWP dollar change for Indicated target rate change (12.0% NOE, leverage 2.0)	=[5]*(1+[22])	7,528	-	-	-				-	798	329	1/4	1,127	
[24]	nominal indemnity LR for Indicated target rate change (12.0% ROE, leverage 2.0)	=[23]-[5]	2,318	-		-	2,318	163	123	-	1	(8)	1 7	(40)	2,5
[25]		=[10]/(1+[22])	64.6%	64.6%	64.6%	64.6%	64.6%	64.8%	65.2%	-	61.1%	61.2%	61.3%	61.1%	64.
[26]	nominal excess legal LR for Indicated target rate change (12.0% ROE, leverage 2.0)	=[13]*[25]	1.0%	1.0%	1.0%	1.0%	1.0%				-				0.
[27]	discounted commission as % of premium, based on alternate target	Exh G-1, col[C], row[6]	5.98%	5.98%	5.98%	5.98%	5.98%	5.98%	5.98%	5.98%	5.98%	5.98%	5.98%	5.98%	5.9
[28]	Retroactive claims fee adjustment (discounted), based on alternate target	goal seek to 0 on col [L], row [42]	0.33%	0.33%	0.33%	0.33%	0.33%	0.33%	0.33%	0.33%	0.33%	0.33%	0.33%	0.33%	0.3
[29]	Alternate basis Return on Premium (i.e. pre-tax return from underwriting, including associated	Exh H-1, row[21]	_	_	_	_	_	_	_	_	_	_	_	_	1 .
[30]	investment income, as % of premium) Alternate rate change basis (0.0% Cost of Capital, leverage 1.83)	=([14]+[16])/([15]-[27]-[18]-[19]-[28]-[29])-1	30.7%	30.7%	30.7%	30.7%	30.7%	22.8%	53.7%	_	(9.3%)	(11.8%)	(7.0%)	(12.7%)	29.
[31]	Avg WP @ Alternate rate change basis (0.0% Cost of Capital, leverage 1.83)		6,809	30.776	30.776	30.7/6	6,809	559	271	-	722	297	157	1,019	7,0
	AWP dollar change for Alternate rate change basis (0.0% Cost of Capital, leverage 1.83)	=[5]*(1+[30])	0,809	-	-	-	0,809	339	2/1	-	'22	297	15/	1,019	, · · · ·
[32]	ATT GOING CHANGE TO AIRCHINGE DATE CHANGE DATE (0.078 COST OF CAPITAL, REVERAGE 1.05)	=[31]-[5]	1,599	-	-	-	1,599	104	95	-	(74)	(40)	(12)	(148)	1,7
[33]	nominal indemnity LR for Alternate rate change basis (0.0% Cost of Capital, leverage 1.83)												' '		1
		=[10]/(1+[30])	71.5%	71.5%	71.5%	71.5%	71.5%	71.7%	72.0%	-	67.6%	67.7%	67.8%	67.6%	71.
[34]	nominal excess legal LR for Alternate rate change basis (0.0% Cost of Capital, leverage 1.83)	=[13]*[33]	1.1%	1.1%	1.1%	1.1%	1.1%	-	-	-	-	-	-	-	1.
[35]	Rate change selected by FA														
		FA Assumptions except RoI; Alternate rate													1
		change basis (0.0% Cost of Capital, leverage		20.70	30.70/	20.7%	20.70/	22.00/	F2 70/		(0.204)	(11.00/)	/7 00/1	(43.70/)	29.
(25)	Ave. MD & Date above advantable FA	1.80), Rol at 2.8% (NL PUB minimum)		30.7%	30.7%	30.7%	30.7%	22.8%	53.7%	-	(9.3%)	(11.8%)	(7.0%)	(12.7%)	
[36]	Avg WP @ Rate change selected by FA	=[5]*(1+[35])	5,210	-	-	-	6,809	559	271	-	722	297	157	1,019	7,6
[37]	AWP dollar change for Rate change selected by FA	=[36]-[5]	-	-	-	-	1,599	104	95	-	(74)	(40)	(12)	(148)	1,
[38]	Annualized Prem chg for Rate change selected by FA	=[4]*[35]	1,250,415	-	-	-	1,250,415	69,794	74,107	-	(5,179)	(4,813)	(2,572)	(235)	1,381,
[39]	nominal indemnity LR for Rate change selected by FA	=[10]/(1+[35])	93.4%	71.5%	71.5%	71.5%	71.5%	71.7%	72.0%	-	67.6%	67.7%	67.8%	67.6%	71.
[40]	nominal excess legal LR for Rate change selected by FA	=[13]*[39]	1.5%	1.1%	1.1%	1.1%	1.1%	-	-	-		-	-	-	1

Alternative Indications - Page 5 of 34

Facility Association Residual Market (FARM)	experience	2006	-	2011	20.0%	RN eff date:		Trend Basis
Jurisidiction: Newfoundland & Labrador	accident yr	2007	-	2012	20.0%	Oct 1 2017	jurisdiction (short form): NL	type: FA Selected
Vehicle Type: Taxi	weights	2008	-	2013	20.0%		major rating class: PUB	market: INDUSTRY
Project ID: NL-2016Q4-TX	used in	2009	-	2014	20.0%	dcst rate:	minor rating class: TX	rating class: CV
Exh C-1	indications	2010	-	2015	20.0%	2.80%	rating type: all	as at: 31-Dec-15

Retroactive claims fee adjustment	72 month LR	ment rate LR	claims expense fee % @ reimburse- ment rate LR	minimum claims expense fee ratio	maximum claims expense fee ratio	base claims expense fee ratio	experience	experience claims expense fee ratio (post min/max)	Retroactive Adjustment	discount by 1 yr	discounted retroactive adjustment
	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[1]	[1]	[K]
[IBNR as % ultimate] as per Exh D-1: 0.7%	(see note 1)	Accounting & Statistical Manual (see note 2)	Statistical	Statistical	Statistical	Accounting & Statistical Manual (see note 2)	={CO [F],	=row[41]:col [H] s.t. max / min, cols [D] & [E]	=[H]-[C]	=1/(1+disc rate)	=[1]*[J]
[41] Retroactive claims fee adjustment at 12.0% ROE	64.1%	67.5%	10.0%	9.0%	16.0%	3.3%	9.7%	9.7%	(0.3%)	0.9728	(0.29%)
[42] Retroactive claims fee adjustment at Alternate Target	70.9%	67.5%	10.0%	9.0%	16.0%	3.3%	10.3%	10.3%	0.3%	0.9728	0.29%
[43] Retroactive claims fee adjustment on Selected Rate Change	70.9%	67.5%	10.0%	9.0%	16.0%	3.3%	10.3%	10.3%	0.3%	0.9728	0.29%

Goal seek to 0.0%, on col[B], row[20]
[L]
=
(0.04%

Exh C-1 Page 2 of 2

Notes:

[72mth LR] = Recorded Claims Ratio @ 72 months*(1-[IBNR as % ultimate])

2 See also Bulletin "All-Canada SC2004-02" issued on Jan. 7, 2004

excess legal as percent of TPL indemnity is AA Report = [ratio as % of total coverages EP] x [latest yr total coverages EP] / [latest yr TPL expected indemnity]

where ratio to EP from excess legal exhibit, and latest yr EP and TPL expected indemnity from a priori exhibit

-				TPL				-
2015 AA Rpt		Exh B.12.1		Exh B.8.6		Projected EP		Exh B.5.6.1
		pg 1 selected - cat I		prov, year		Adjustment		pg 1, col [5]
		excess ratio % total EP		2015 all coverage EP		2015 all coverage EP		2015 TPL expected indemnity
1.6%	=	1.32%	x	6.527.092	×	1.000	1	5.336.000

Facility Association Residual Market (FARM)

Jurisidiction: Newfoundland & Labrador Vehicle Type: Taxi

Project ID: NL-2016Q4-TX

Derivation of Loss Ratios Underlying Current (i.e. "Expiring") Rates

ite level factor exhibit

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

Exh C-2 Page 1 of 1

Ba	sis: last submitted rate filing	Formulae	Third Party Liability	Bodily Injury	Property Damage	DCPD	TPL (indivisible)	Accident Benefits	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils	All Perils	TOTAL
[1]	Distribution Used	Exh C-3 (option 1), row [6]	87.84%	-	Damage		87.84%	5.71%	3.65%	Wiotorist	1.25%	0.80%	0.48%	0.27%	100
[2]	Projected ultimate loss ratio (nominal), prior to rate adjustment	Exh C-3 (option 1),			-					<u> </u>					
[3]	FA Written Rate Level Factor from last submitted filing	row [10] Prior Filing Exh C-2,	108.6%	108.60%	108.60%	108.60%	108.60%	118.30%	132.90%	-	57.70%	66.80%	70.60%	62.60%	10
		row [26]		2.2435	2.2435	2.2435	2.2435	8.3209	10.9405	1.0000	0.2104	0.2694	0.4548	0.230	
[4]	FA Written Rate Level Factor - current	=[26]		2.7954	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.1964	0.2712		0.2210	
[5]	Estimated impact of subsequent rate changes	=[4]/[3]-1	24.6%	24.6%	24.6%	24.6%	24.6%	42.2%	50.9%	=	(6.7%)	0.7%	3.0%	(3.9%)	
[6]	Reform adjustment factors for changes not considered in prior analysis in its														
	projection to average accident date	as needed		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		1.000	
[7]	loss ratio (nominal) at current rates	=[2]*[6])/(1+ [5])	87.2%	87.2%	87.2%	87.2%	87.2%	83.2%	88.1%	-	61.8%	66.3%	68.5%	65.1%	
[8]	Modeled loss cost projected to average accident date, prior analysis	Exh D-5a		e	-	-	872.61	28.30	8.13	0.68	258.13	179.72	64.58	231.99	
	Modeled loss cost projected to average accident date, current analysis														
[9]		Exh D-5a		-	-	-	900.11	28.30	8.78	0.68	258.13	179.72	64.58	231.99	
[10]	indemnity projection factor between average accident date underlying	(0)/(0)	1.0320	1.0315	4.0245	1.0315	4 0245	4 0000	4.0000	1 0000	4 0000	4 0000	4 0000	1.0000	
[11]	current rates and future average accident date annualized indemnity change	=[9]/[8] =[10]^(365/Exh B-1,	1.0320	1.0315	1.0315	1.0315	1.0315	1.0000	1.0800	1.0000	1.0000	1.0000	1.0000	1.0000	1
[11]	annualized indentificy change	row [4])-1	3.2%	3.2%	3.2%	3.2%	3.2%	_	8.0%	_	_	_	_	_	
[12]	annualized premium trend factor	1+Exh D-4a, Total	3.270	3.2%	3.270	3.276	3.2%	-	6.0%	-	-			-	
[+4]	amounted premium trend factor	Drift	1.0010	1.0010	1.0010	1.0010	1.0010	1.0000	1.0000	1.0000	1.0643	1.0608	1.0608	1.0643	1
[13]	premium trend period in days (change in avg written date between rate	Dille	1.0010	1.0010	1.0010	1.0010	1.0010	1.0000	1.0000	1.0000	1.0043	1.0000	1.0000	1.0043	
[]	programs)	Exh B-1, row [2]	365	365	365	365	365	365	365	365	365	365	365	365	
[14]	projected indemnity loss ratio (nominal) at current rates	=[7]*[10]/{[12]^([13]													
	, ,,	/365)}	89.9%	89.9%	89.9%	89.9%	89.9%	83.2%	95.1%	-	58.1%	62.5%	64.6%	61.2%	
(\$	1s) unless otherwise indicated	Formulae	Liability	Bodily Injury		DCPD	TPL (indivisible)	Ronofite		Motorist	Collision				
	Exposures, Rolling 12	FA AIX as at: Dec 31 20	Liability 015	,,.,	Damage		, ,	Benefits	Automobile	Motorist					
Written I	Exposures, Rolling 12 20151	FA AIX as at: Dec 31 20	015 434	-	Damage -	-	434	375	437	-	39	70		2	
Vritten ([15] [16]	Exposures, Rolling 12 20151 20152	FA AIX as at: Dec 31 20	015 434 348	=	Damage - -		434 348	375 298	437 347	- (1)	39 31	51	91	-	
Written ([15] [16] [17]	Exposures, Rolling 12 20151 20152 TOTAL	FA AIX as at: Dec 31 20	015 434 348 782	- - -	Damage - - -	- - -	434	375	437	-	39		91	2 - 2	
Written [15] [16] [17] Written	Exposures, Rolling 12 20151 20152 TOTAL Premium, Rolling 12	FA AIX as at: Dec 31 20 FA AIX as at: Dec 31 20	015 434 348 782	=	Damage		434 348 782	375 298 673	437 347 784	- (1)	39 31 70	51 121	91 217	2	1 31
Vritten [15] [16] [17] Vritten	Exposures, Rolling 12 20151 20152 707AL Premium, Rolling 12 20151	FA AIX as at: Dec 31 20 FA AIX as at: Dec 31 20	015 434 348 782 015 1,201,609	=	Damage		434 348 782 1,201,609	375 298 673 28,566	437 347 784	(1) (1)	39 31 70 41,417	51 121 22,263	91 217 14,769	-	
Vritten ([15] [16] [17] Vritten ([18] [19]	Exposures, Rolling 12 20151 20152 TOTAL Premium, Rolling 12	FA AIX as at: Dec 31 20 FA AIX as at: Dec 31 20	015 434 348 782 015 1,201,609 1,078,673	=	Damage	-	434 348 782	375 298 673	437 347 784	(1) (1)	39 31 70	51 121	91 217 14,769 10,863	2,198	1,19
Written [15] [16] [17] Written [18] [19] [20]	Exposures, Rolling 12 20151 20152 TOTAL Premium, Rolling 12 20151 20152	FA AIX as at: Dec 31 20 FA AIX as at: Dec 31 20	015 434 348 782 015 1,201,609	- - -	- - - -	- - - -	434 348 782 1,201,609 1,078,673	375 298 673 28,566 41,112	437 347 784 9,161 13,741	- (1) (1) - (25)	39 31 70 41,417 30,698	22,263 18,425	91 217 14,769 10,863	2	1,19
Written [15] [16] [17] Written [18] [19] [20]	Exposures, Rolling 12 20151 20152 TOTAL Premium, Rolling 12 20151 20152 TOTAL	FA AIX as at: Dec 31 20	015 434 348 782 015 1,201,609 1,078,673	- - -	- - - -	- - - -	434 348 782 1,201,609 1,078,673	375 298 673 28,566 41,112	437 347 784 9,161 13,741	- (1) (1) - (25)	39 31 70 41,417 30,698	22,263 18,425	91 217 14,769 10,863 25,632	2,198	1,19 2,51
[15] [16] [17]	Exposures, Rolling 12 20151 20152 707AL Premium, Rolling 12 20151 20152 707AL Written Premium, Rolling 12, \$s 20151 20152	FA AIX as at: Dec 31 20	015 434 348 782 015 1,201,609 1,078,673 2,280,282 2,771 3,098	- - - -	- - - -	- - - -	434 348 782 1,201,609 1,078,673 2,280,282 2,771 3,098	375 298 673 28,566 41,112 69,678	437 347 784 9,161 13,741 22,902	- (1) (1) - (25) (25)	39 31 70 41,417 30,698 72,115	51 121 22,263 18,425 40,688 319 360	91 217 14,769 10,863 25,632 117 120	2,198 - 2,198 1,388	1,19
(15) (16) (17) (17) (18) (19) (20) (21)	Exposures, Rolling 12 20151 20152 TOTAL Premium, Rolling 12 20151 20152 TOTAL Written Premium, Rolling 12, \$s 20151	FA AIX as at: Dec 31 20	015 434 348 782 015 1,201,609 1,078,673 2,280,282	- - - -	- - - -	- - - -	434 348 782 1,201,609 1,078,673 2,280,282	375 298 673 28,566 41,112 69,678	437 347 784 9,161 13,741 22,902	- (1) (1) - (25) (25)	39 31 70 41,417 30,698 72,115	51 121 22,263 18,425 40,688 319	91 217 14,769 10,863 25,632 117 120	2 2,198 - 2,198 1,388	1,1
Vritten [15] [16] [17] Vritten [18] [20] [21] [22] [23] [23] vst Cur (\$	Exposures, Rolling 12 20151 20152 TOTAL Premium, Rolling 12 20151 20152 TOTAL Written Premium, Rolling 12, \$s 20151 20152 TOTAL T	FA AIX as at: Dec 31 20 FA AIX as at: Dec 31 20 ate Level	015 434 348 782 015 1,201,609 1,078,673 2,280,282 2,771 3,098				434 348 782 1,201,609 1,078,673 2,280,282 2,771 3,098 2,917	375 298 673 28,566 41,112 69,678 76 138	437 347 784 9,161 13,741 22,902 21 40 29	(1) (1) (25) (25) (25) - 25 25	39 31 70 41,417 30,698 72,115 1,064 988 1,030	51 22,263 18,425 40,688 319 360 336	91 217 14,769 10,863 25,632 117 120 118	2,198 - 2,198 1,388 - 1,388	1,1
/ritten [15]	Exposures, Rolling 12 20151 20152 TOTAL Premium, Rolling 12 20151 20152 TOTAL Written Premium, Rolling 12, \$s 20151 20152 TOTAL	FA AIX as at: Dec 31 20 FA AIX as at: Dec 31 20 ate Level	015 434 348 782 015 1,201,609 1,078,673 2,280,282 2,771 3,098				434 348 782 1,201,609 1,078,673 2,280,282 2,771 3,098 2,917	375 298 673 28,566 41,112 69,678 76 138 104	437 347 784 9,161 13,741 22,902 21 40 29	(1) (1) (25) (25) (25) 25 25 1.0000	39 31 70 41,417 30,698 72,115 1,064 988 1,030	51 121 22,263 18,425 40,688 319 360 336	91 217 14,769 10,863 25,632 117 120 118	2,198 - 2,198 - 1,388 - 1,388 - 2/3 CL, 1/3 CM	1,19
Vritten [15] [16] [17] Vritten [18] [19] [20] Vverage [21] [22] [23] Vritten [24] [25] [25]	Exposures, Rolling 12 20151 20152 707AL Premium, Rolling 12 20151 20152 707AL Written Premium, Rolling 12, \$s 20151 20152 707AL TOTAL rent 12-Months Exposure and Premium Adjusted to Current R 1s) unless otherwise indicated Rate Level Factors 20151 20152	FA AIX as at: Dec 31 20 FA AIX as at: Dec 31 20 ate Level	015 434 348 782 015 1,201,609 1,078,673 2,280,282 2,771 3,098	- - - - - - - - - - - - - - - - - - -	1.5000	1.5000	434 348 782 1,201,609 1,078,673 2,280,282 2,771 3,098 2,917	375 298 673 28,566 41,112 69,678 76 138 104	437 347 784 9,161 13,741 22,902 21 40 29	(1) (1) (25) (25) (25) - 25 25 25 1.0000	39 31 70 41,417 30,698 72,115 1,064 988 1,030	51 121 22,263 18,425 40,688 319 360 336	91 217 14,769 10,863 25,632 117 120 118	2,198 - 2,198 1,388 - 1,388 - 1,388 2/3 CL, 1/3 CM 0.3220 0.3110	1,19 2,51
Vritten [15] [16] [17] Vritten [18] [19] [20] Vverage [21] [22] [23] Vritten [24] [25] [26] [26]	Exposures, Rolling 12 20151 20152 TOTAL Premium, Rolling 12 20151 20152 TOTAL Written Premium, Rolling 12, \$s 20151 20152 TOTAL Written Premium, Rolling 12, \$s 20151 20152 TOTAL TOTAL	FA AIX as at: Dec 31 20 FA AIX as at: Dec 31 20 ate Level	015 434 348 782 015 1,201,609 1,078,673 2,280,282 2,771 3,098				434 348 782 1,201,609 1,078,673 2,280,282 2,771 3,098 2,917	375 298 673 28,566 41,112 69,678 76 138 104	437 347 784 9,161 13,741 22,902 21 40 29	(1) (1) (25) (25) (25) 25 25 1.0000	39 31 70 41,417 30,698 72,115 1,064 988 1,030	51 121 22,263 18,425 40,688 319 360 336	91 217 14,769 10,863 25,632 117 120 118	2,198 - 2,198 - 1,388 - 1,388 - 2/3 CL, 1/3 CM	1,19 2,51
/ritten [15] [20] [21] [22] [23] [24] [25] [26] /ritten [24] [25] [26] /ritten [26] /ritten [26] /ritten [27] [28] [28] [28] [28] [28] [28] /ritten [28] [28] /ritten [28] [28] /ritten [28] [28] /ritten /ritten [28] /ritten /ritten /ritten /ritten /ritten /ritten	Exposures, Rolling 12 20151 20152 TOTAL Premium, Rolling 12 20151 20152 20151 20152 TOTAL Written Premium, Rolling 12, \$s 20151 20152 TOTAL rent 12-Months Exposure and Premium Adjusted to Current R 1s) unless otherwise indicated Rate Level Factors 20151 20152 last available mth:	FA AIX as at: Dec 31 20 FA AIX as at: Dec 31 20 ate Level 31-Dec-19	015 434 348 782 015 1,201,609 1,078,673 2,280,282 2,771 3,098 2,917	1.5000 1.6565 2.7954	1.5000	1.5000	434 348 782 1,201,609 1,078,673 2,280,282 2,771 3,098 2,917 1.5000 1.6565 2,7954	375 298 673 28,566 41,112 69,678 76 138 104 2.0000 3.5478 11.8323	437 347 784 9,161 13,741 22,902 21 40 29 2,0000 3,6365 16,5092	(1) (1) (25) (25) (25) 25 25 25 1.0000 1.0000	39 31 70 41,417 30,698 72,115 1,064 988 1,030 0.3194 0.3013 0.1964	51 121 22,263 18,425 40,688 319 360 336	91 217 14,769 10,863 25,632 117 120 118 2 0.3968 0.3945 0.4683	2,198 - 2,198 1,388 - 1,388 - 1,388 0,327 0,3210 0,3220 0,3110 0,2210	1,1 ¹ 2,5:
/ritten [15] [16] [17] /ritten [18] [19] (20] (21] [22] [23] (5) (5) (25] [26] /ritten [27] (2	Exposures, Rolling 12 20151 20152 20152 Premium, Rolling 12 20151 20152 20151 20152 TOTAL Written Premium, Rolling 12, \$s 20151 20152 TOTAL rent 12-Months Exposure and Premium Adjusted to Current R 1s) unless otherwise indicated Rate Level Factors 20151 20152 last available mth: Premium @ Current Rates, Rolling 12	FA AIX as at: Dec 31 20 FA AIX as at: Dec 31 20 FA AIX as at: Dec 31 20 ate Level 31-Dec-19 =[18]*[26]/[24]	015 434 348 782 015 1,201,609 1,078,673 2,280,282 2,771 3,098 2,917 2,239,319	- - - - - - - - - - - - - - - - - - -	1.5000	1.5000	434 348 782 1,201,609 1,078,673 2,280,282 2,771 3,098 2,917 1,5000 1,6565 2,7954	375 298 673 28,566 41,112 69,678 76 138 104	437 347 784 9,161 13,741 22,902 21 40 29 2,0000 3,6365 16,5092 75,620	(1) (1) (25) (25) (25) - 25 25 25 1.0000 1.0000	39 31 70 41,417 30,698 72,115 1,064 988 1,030 0.3194 0.3013 0.1964	51 121 22,263 18,425 40,688 319 360 336 0.3267 0.3291 0.2712	91 217 14,769 10,863 25,632 117 120 118 2 0.3968 0.3945 0.4683	2,198 - 2,198 1,388 - 1,388 - 1,388 2/3 CL, 1/3 CM 0.3220 0.3110	1,19 2,51
/ritten [15] [16] [17] /ritten [18] [19] [20] verage [21] [22] [23] st Cur (\$ (\$ 25] /ritten [24] [25] /ritten [27] [28]	Exposures, Rolling 12 20151 20152 TOTAL Premium, Rolling 12 20151 20152 TOTAL Written Premium, Rolling 12, \$s 20151 20152 TOTAL Written Premium, Rolling 12, \$s 20151 20152 TOTAL Premt 12-Months Exposure and Premium Adjusted to Current R 1s) unless otherwise indicated Rate Level Factors 20151 20152 last available mth: Premium @ Current Rates, Rolling 12 20151	FA AIX as at: Dec 31 20 FA AIX as at: Dec 31 20 FA AIX as at: Dec 31 20 ate Level 31-Dec-19 =[18]*[26]/[24]	015 434 348 782 015 1,201,609 1,078,673 2,280,282 2,771 3,098 2,917 2,239,319 1,820,297	1.5000 1.6565 2.7954	1.5000	1.5000	434 348 782 1,201,609 1,078,673 2,280,282 2,771 3,098 2,917 1,5000 1,6565 2,7954 2,239,319 1,820,297	28,566 41,112 69,678 76 138 104 2.0000 3.5478 11.8323 169,001 137,113	437 347 784 9,161 13,741 22,902 21 40 29 2,0000 3,6365 16,5092 75,620 62,382	. (1) (1) (25) (25) (25) (25) (25) (25) (25) (25	39 31 70 41,417 30,698 72,115 1,064 988 1,030 0.3194 0.3013 0.1964 25,467 20,010	51 121 22,263 18,425 40,688 319 360 336 0.3267 0.3291 0.2712	91 217 14,769 10,863 25,632 117 120 118 2 0.3968 0.3968 0.3945 0.4683	2,198 - 2,198 1,388 1,388 1,388 2/3 CL, 1/3 CM 0,3220 0,3110 0,2210	2,54 2,00
(15 (16 (17 (18	Exposures, Rolling 12 20151 20152 20152 TOTAL Premium, Rolling 12 20151 20152 20152 TOTAL Written Premium, Rolling 12, \$s 20151 20152 TOTAL rent 12-Months Exposure and Premium Adjusted to Current R 1s) unless otherwise indicated Rate Level Factors 20151 20152 last available mth: Premium @ Current Rates, Rolling 12 20151 20152 TOTAL	FA AIX as at: Dec 31 20 FA AIX as at: Dec 31 20 FA AIX as at: Dec 31 20 ate Level 31-Dec-19 =[18]*[26]/[24]	015 434 348 782 015 1,201,609 1,078,673 2,280,282 2,771 3,098 2,917 2,239,319	1.5000 1.6565 2.7954	1.5000 1.6565 2.7954	1.5000	434 348 782 1,201,609 1,078,673 2,280,282 2,771 3,098 2,917 1,5000 1,6565 2,7954	375 298 673 28,566 41,112 69,678 76 138 104	437 347 784 9,161 13,741 22,902 21 40 29 2,0000 3,6365 16,5092 75,620	(1) (1) (25) (25) (25) - 25 25 25 1.0000 1.0000	39 31 70 41,417 30,698 72,115 1,064 988 1,030 0.3194 0.3013 0.1964	51 121 22,263 18,425 40,688 319 360 336 0.3267 0.3291 0.2712	91 217 14,769 10,863 25,632 117 120 118 2 0.3968 0.3945 0.4683	2,198 - 2,198 1,388 - 1,388 - 1,388 0,327 0,3210 0,3220 0,3110 0,2210	1,31 1,19 2,51 2,51 2,54 2,06 4,61
(15 (16 (17 (18	Exposures, Rolling 12 20151 20152 TOTAL Premium, Rolling 12 20151 20152 TOTAL Written Premium, Rolling 12, \$s 20151 20152 TOTAL Written Premium, Rolling 12, \$s 20151 20152 TOTAL Premt 12-Months Exposure and Premium Adjusted to Current R 1s) unless otherwise indicated Rate Level Factors 20151 20152 last available mth: Premium @ Current Rates, Rolling 12 20151	FA AIX as at: Dec 31 20 FA AIX as at: Dec 31 20 ate Level 31-Dec-19 =[18]*[26]/[24] =[19]*[26]/[25]	015 434 348 782 015 1,201,609 1,078,673 2,280,282 2,771 3,098 2,917 2,239,319 1,820,297	1.5000 1.6565 2.7954	1.5000 1.6565 2.7954	1.5000	434 348 782 1,201,609 1,078,673 2,280,282 2,771 3,098 2,917 1,5000 1,6565 2,7954 2,239,319 1,820,297	28,566 41,112 69,678 76 138 104 2.0000 3.5478 11.8323 169,001 137,113	437 347 784 9,161 13,741 22,902 21 40 29 2,0000 3,6365 16,5092 75,620 62,382	. (1) (1) (25) (25) (25) (25) (25) (25) (25) (25	39 31 70 41,417 30,698 72,115 1,064 988 1,030 0.3194 0.3013 0.1964 25,467 20,010	51 121 22,263 18,425 40,688 319 360 336 0.3267 0.3291 0.2712	91 217 14,769 10,863 25,632 117 120 118 2 0.3968 0.3945 0.4683 17,430 12,895 30,325	2,198 - 2,198 1,388 1,388 1,388 2/3 CL, 1/3 CM 0,3220 0,3110 0,2210	2,54 2,51
Vritten [15] [16] [17] Vritten [18] [19] [20] [20] [21] [22] [23] [25] [26] [26] Vritten [27] [27] [28] [28] [29] verage	Exposures, Rolling 12 20151 20152 TOTAL Premium, Rolling 12 20151 20152 TOTAL Written Premium, Rolling 12, \$s 20151 20152 TOTAL Written Premium, Rolling 12, \$s 20151 20152 TOTAL Written Premium @ Current Rates, Rolling 12, \$s	FA AIX as at: Dec 31 20 FA AIX as at: Dec 31 20 ate Level 31-Dec-19 =[18]*[26]/[24] =[19]*[26]/[25]	015 434 348 782 782 782 782 782 782 782 782 782 78	1.5000 1.6565 2.7954	1.5000 1.6565 2.7954	1.5000	1,201,609 1,078,673 2,280,282 2,771 3,098 2,917 1,5000 1,6565 2,7954 2,239,319 1,820,297 4,059,616	375 298 673 28,566 41,112 69,678 76 138 104 2.0000 3.5478 11.8323 169,001 137,113 306,114	437 347 784 9,161 13,741 22,902 21 40 29 2,0000 3,6365 16,5092 75,620 62,382 138,002	. (1) (1) (25) (25) (25)	39 31 70 41,417 30,698 72,115 1,064 988 1,030 0.3194 0.3013 0.1964 25,467 20,010 45,477	51 121 22,263 18,425 40,688 319 360 336 0.3267 0.3291 0.2712 18,481 15,183 33,664	91 217 14,769 10,863 25,632 117 120 118 2 0.3968 0.3945 0.4683 17,430 12,895 30,325	2,198 - 2,198 1,388 - 1,388 - 1,388 2/3 CL, 1/3 CM 0.3220 0.3110 0.2210 1,509	2,5:
/ritten [15] [16] [17] [17] [18] [19] [20] [21] [22] [23] [24] [25] [26] [27] [28] [29] [29] [29] [29] [30] [30]	Exposures, Rolling 12 20151 20152 20152 TOTAL Premium, Rolling 12 20151 20152 20151 20152 TOTAL Written Premium, Rolling 12, \$s 20151 20152 TOTAL rent 12-Months Exposure and Premium Adjusted to Current R 1s) unless otherwise indicated Rate Level Factors 20151 20152 last available mth: Premium @ Current Rates, Rolling 12 20151 20152 TOTAL Written Premium @ Current Rates, Rolling 12, \$s 20151	FA AIX as at: Dec 31 20 FA AIX as at: Dec 31 20 ate Level 31-Dec-19 =[18]*[26]/[24] =[19]*[26]/[25]	015 434 348 782 015 1,201,609 1,078,673 2,280,282 2,771 3,098 2,917 2,239,319 1,820,297 4,059,616	1.5000 1.6565 2.7954	1.5000 1.6565 2.7954	1.5000	434 348 782 1,201,609 1,078,673 2,280,282 2,771 3,098 2,917 1,5000 1,6565 2,7954 2,239,319 1,820,297 4,059,616	2,0000 3,5478 118,323 169,001 3,5478 1451 451	437 347 784 9,161 13,741 22,902 21 40 29 2,0000 3,6365 16,5092 75,620 62,382 138,002	1.0000 1.0000 1.25) (25)	39 31 70 41,417 30,698 72,115 1,064 988 1,030 0.3194 0.3013 0.1964 25,467 20,010 45,477	51 22,263 18,425 40,688 319 360 336 0.3267 0.3291 0.2712 18,481 15,183 33,664	91 217 14,769 10,863 25,632 117 120 118 0.3968 0.3945 0.4683 17,430 12,895 30,325	2,198 - 2,198 1,388 - 1,588 -	2,5 2,5
/ritten [15] [16] [17] [18] [19] [20] [21] [22] [23] [24] [25] [26] [27] [28] [27] [28] [29] [27] [28] [29] [27] [28] [28] [27] [28]	Exposures, Rolling 12 20151 20152 20152 TOTAL Premium, Rolling 12 20151 20152 20152 TOTAL Written Premium, Rolling 12, \$s 20151 20152 TOTAL rent 12-Months Exposure and Premium Adjusted to Current R 1s) unless otherwise indicated Rate Level Factors 20151 20152 last available mth: Premium @ Current Rates, Rolling 12 20151 20152 TOTAL Written Premium @ Current Rates, Rolling 12	FA AIX as at: Dec 31 20 FA AIX as at: Dec 31 20 ate Level 31-Dec-19 =[18]*[26]/[24] =[19]*[26]/[25]	2,239,319 1,820,297 4,059,616 5,128 5,193	1.5000 1.6565 2.7954	1.5000 1.6565 2.7954	1.5000	1,201,609 1,078,673 2,280,282 2,771 3,098 2,917 1.5000 1.6565 2,7954 2,239,319 1,820,297 4,059,616 5,165 5,228	28,566 41,112 69,678 76 138 104 2,0000 3,5478 11,8323 169,001 137,113 306,114 451	437 347 784 9,161 13,741 22,902 21 40 29 2,0000 3,6365 16,5092 75,620 62,382 138,002	. (1) (1) (25) (25) (25) (25) (25) (25) (25) (25)	39 31 70 41,417 30,698 72,115 1,064 988 1,030 0.3194 0.3013 0.1964 25,467 20,010 45,477	51 121 22,263 18,425 40,688 319 360 336 0.3267 0.3291 0.2712 18,481 15,183 33,664	91 217 14,769 10,863 25,632 117 120 118 0.3968 0.3945 0.4683 17,430 12,895 30,325	2,198 2,198 1,388 1,388 - 1,388 2/3 CL, 1/3 CM 0.3220 0.3110 0.2210 1,509 - 1,509 - 1,509 - 1,509 - 1,509 - 1,509	2,5 2,5
(15 (15	Exposures, Rolling 12 20151 20152 Premium, Rolling 12 20151 20152 20151 20152 20151 20152 TOTAL Written Premium, Rolling 12, \$s 20151 20152 TOTAL rent 12-Months Exposure and Premium Adjusted to Current R 1s) unless otherwise indicated Rate Level Factors 20151 20152 last available mth: Premium @ Current Rates, Rolling 12 20151 20152 TOTAL Written Premium @ Current Rates, Rolling 12 20151 20152 TOTAL Written Premium @ Current Rates, Rolling 12, \$s 20151 20152 TOTAL	FA AIX as at: Dec 31 20 FA AIX as at: Dec 31 20 ate Level 31-Dec-19 =[18]*[26]/[24] =[19]*[26]/[25] Projected to Futu	2,239,319 1,820,297 4,059,616 5,128 5,193	1.5000 1.6565 2.7954	1.5000 1.6565 2.7954	1.5000	1,201,609 1,078,673 2,280,282 2,771 3,098 2,917 1.5000 1.6565 2,7954 2,239,319 1,820,297 4,059,616 5,165 5,228	28,566 41,112 69,678 76 138 104 2,0000 3,5478 11,8323 169,001 137,113 306,114 451	437 347 784 9,161 13,741 22,902 21 40 29 2,0000 3,6365 16,5092 75,620 62,382 138,002	. (1) (1) (25) (25) (25) (25) (25) (25) (25) (25)	39 31 70 41,417 30,698 72,115 1,064 988 1,030 0.3194 0.3013 0.1964 25,467 20,010 45,477	51 121 22,263 18,425 40,688 319 360 336 0.3267 0.3291 0.2712 18,481 15,183 33,664	91 217 14,769 10,863 25,632 117 120 118 2 0.3968 0.3945 0.4683 17,430 12,895 30,325 138 142	2,198 2,198 1,388 1,388 - 1,388 2/3 CL, 1/3 CM 0.3220 0.3110 0.2210 1,509 - 1,509 - 1,509 - 1,509 - 1,509 - 1,509	2,54 2,00
Written [15] [16] [17] [17] [18] [19] [19] [20] [21] [22] [23] [25] [26] [26] [27] [28] [26] [27] [28] [29] [28] [29] [28] [29] [28] [29] [30] [31] [32] [35]	Exposures, Rolling 12 20151 20152 TOTAL Premium, Rolling 12 20151 20152 TOTAL Written Premium, Rolling 12, \$s 20151 20152 TOTAL Written Premium, Rolling 12, \$s 20151 20152 TOTAL **Tent 12-Months Exposure and Premium Adjusted to Current R 1s) unless otherwise indicated Rate Level Factors 20151 20152 Premium @ Current Rates, Rolling 12 20151 20152 TOTAL Written Premium @ Current Rates, Rolling 12, \$s 20151 20152 TOTAL **Written Premium @ Current Rates, Rolling 12, \$s 20151 20152 TOTAL **Written Premium @ Current Rates, Rolling 12, \$s 20151 20152 TOTAL	FA AIX as at: Dec 31 20 FA AIX as at: Dec 31 20 ate Level 31-Dec-19 =[18]*[26]/[24] =[19]*[26]/[25] Projected to Futu	2,239,319 1,820,297 4,059,616 5,128 5,193	1.5000 1.6565 2.7954	1.5000 1.6565 2.7954	1.5000 1.6565 2.7954	1,201,609 1,078,673 2,280,282 2,771 3,098 2,917 1,5000 1,6565 2,7954 2,239,319 1,820,297 4,059,616 5,165 5,228 5,193	28,566 41,112 69,678 76 138 104 2,0000 3,5478 11,8323 169,001 137,113 306,114 451 459 455	437 347 784 9,161 13,741 22,902 21 40 29 2,0000 3,6365 16,5092 75,620 62,382 138,002	1.0000 1.0000 1.25) (25) 25 25 25 25 25 25 25 25 25 25	39 31 70 41,417 30,698 72,115 1,064 988 1,030 0.3194 0.3013 0.1964 25,467 20,010 45,477 654 644 650	51 121 22,263 18,425 40,688 319 360 336 0.3267 0.3291 0.2712 18,481 15,183 33,664 265 296 278	91 217 14,769 10,863 25,632 117 120 118 2 0.3968 0.3945 0.4683 17,430 12,895 30,325 138 142	2,198 - 2,198 - 1,388 - 1,509	2,54 2,00

Exh C-3 (option 1)

DIRECT < COPY-PASTE VALUE > FROM Exh C-1 of last submitted rate filing
Project ID: NL-2016Q1-TX

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all Exh C-3 (option 1) Page 1 of 2

.\..\proj 2016 Q1\01a indication (coverage)\01e NL 2016 Q1 TX indications - coverage v05.xlsx

Derivation	of Indicated Change in Overall Rate Level		[A]	[B]	[c]	[D]	[E]	[F]	[G]	[H]	[1]	[1]	[K]	[L]	[M]
(\$1s	s) unless otherwise indicated		Third Party Liability	Bodily Injury	Property Damage	DCPD	TPL (indivisible)	Accident Benefits	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils	All Perils	TOTAL
Facility Associ	iation Exposures & Premium	FA AIX as at: Dec 31 2014	Liability		Dairiage		(IIIdivisible)	Delicito	Automobile	IVIOLOTISE					
[1]	FA Written Exposures, Rolling 12	Exh C-2, row [17]	771				771	641	785	-	53	115	222	11	78
[2]	FA Written Premium, Rolling 12	Exh C-2, row [20]	2,171,672				2,171,672	51,049	17,011	-	61,208	34,085	24,873	13,452	2,373,35
[3]	FA Average Written Premium, Rolling 12, \$s	Exh C-2, row [23]	2,816				2,816	80	22	-	1,153	297	112	1,281	3,02
[4]	FA Written Premium @ Current Rates, Projected to Future Period	Exh C-2, row [34]	3,269,210				3,269,210	212,387	135,739	-	46,492	29,683	17,856	10,233	3,721,60
[5]	FA Avg Written Premium @ Current Rates, Projected to Future Period, \$s	Exh C-2, row [35]	4,239				4,239	332	173	-	876	258	81	975	4,74
[6]	Premium distribution @ current rates	([4] by coverage)/([4] total)	87.84%	-	-	-	87.84%	5.71%	3.65%	-	1.25%	0.80%	0.48%	0.27%	100.00
Jpdated Proje	ected Loss Ratio (indemnity only, nominal) @ Current Rates														
[7]	Updated projected loss ratio (indemnity only, nominal), prior analysis	Exh C-2, row [14]	101.7%	101.7%	101.7%	101.7%	101.7%	99.9%	92.5%	-	62.1%	67.9%	72.6%	64.7%	100.3
Projected Los	s Ratio (indemnity only, nominal) based on FA experience														
[8]	FA projected ultimate loss ratio (indemnity only, nominal)	Exh D-1, col [17]	116.1%	116.1%	116.1%	116.1%	116.1%	160.4%	429.0%	-	32.1%	61.3%	51.5%	24.4%	128.0
Credibility-We	eighted Projected Loss Ratio (indemnity only, nominal)				ĺ										
[9]	FA experience credibility	Exh E-1, col [8]		48.1%	48.1%	48.1%	48.1%	30.4%	12.0%	-	14.6%	16.4%	9.6%	5.3%	1
[10]	Credibility-weighted projected Loss Ratio (indeminty only, nominal)	=[8]*[9]+[7]*(1-[9])	108.6%	108.6%	108.6%	108.6%	108.6%	118.3%	132.9%	-	57.7%	66.8%	70.6%	62.6%	108.8
Projected Los	s Ratio (indemnity & excess legal, discounted @ 0.39%)														
[11]	Loss discount factor	Exh F-2 (re-wghted)	0.9857	0.9857	0.9857	0.9857	0.9857	0.9901	0.9901	0.9846	0.9962	0.9955	0.9955	0.9962	0.986
[12]	Credibility-weighted projected loss ratio (indemnity only, discounted)	=[10]*[11]	107.0%	107.0%	107.0%	107.0%	107.0%	117.1%	131.6%	-	57.5%	66.5%	70.3%	62.4%	107.2
[13]	excess legal as % indemnity	see note 3 below	1.4%	1.4%	1.4%	1.4%	1.4%	-							1.2
[14]	Cred-wght'd projected loss ratio (indemnity & excess legal, discounted)	=[12]*(1+[13])	108.5%	108.5%	108.5%	108.5%	108.5%	117.1%	131.6%	-	57.5%	66.5%	70.3%	62.4%	108.6
Discounted Re	evenue, Expenses and Capital Costs														
[15]	Revenue discount factor	Exh G-1, col[C], row[3]	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	0.9995	0.999
[16]	Total discounted fixed expenses, as % of current on-level premium	Exh G-1, col[C], row[30] for TPL, otherwise													
		row[21]	3.21%	3.21%	3.21%	3.21%	3.21%	2.20%	2.20%	2.20%	2.20%	2.20%	2.20%	2.20%	3.09
[17]	Discounted effective commission ratio (based on Indicated rate level change)	Exh G-1, col[C], row[5] Exh G-1, col[C], row[17] for TPL, otherswise	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00
[18]	Total discounted variable expenses prem tax, S.C. non-claims fees, as % of premium	row[15]	14.20%	14.20%	14.20%	14.20%	14.20%	14.20%	14.20%	14.20%	14.20%	14.20%	14.20%	14.20%	14.20
[19]	Discounted variable S.C. initial claims fee, as % of premium	Exh G-1, col[C], row[18]	9.96%	9.96%	9.96%	9.96%	9.96%	9.96%	9.96%	9,96%	9.96%	9.96%	9.96%	9.96%	9.96
[20]	Retroactive claims fee adjustment (discounted), as % of premium @ target rate	goal seek to 0 on col [L], row 0.61	(0.62%)	(0.62%)	(0.62%)	(0.62%)	(0.62%)	(0.62%)	(0.62%)	(0.62%)	(0.62%)	(0.62%)	(0.62%)	(0.62%)	(0.629
[21]	Target Return on Premium (i.e. pre-tax return from underwriting, including associated investment	goal seek to o on cor [2], row o.o.	, ,	` 1	` 1		, ,	, ,	, ,	' 1	` 1		1 1	, ,	,
[22]	income, as % of premium)	Exh H-1, row[15]	8.26%	8.26%	8.26%	8.26%	8.26%	8.26%	8.26%	8.26%	8.26%	8.26%	8.26%	8.26%	8.26
Rate Indicatio															1
[22]	Indicated target rate change (12.0% ROE, leverage 2.0)	=([14]+[16])/([15]-[17]-[18]-[19]-[20]-[21])-1	79.7%	79.7%	79.7%	79.7%	79.7%	92.0%	115.3%	-	(3.9%)	10.5%	16.7%	3.9%	79.6
[23]	Avg WP @ Indicated target rate change (12.0% ROE, leverage 2.0)	=[5]*(1+[22])	7,617	-	-	-	7,617	637	372	-	842	285	95	1,013	8,51
[24]	AWP dollar change for Indicated target rate change (12.0% ROE, leverage 2.0)	=[23]-[5]	3,378	-	-	-	3,378	305	199	-	(34)	27	14	38	3,77
[25]	nominal indemnity LR for Indicated target rate change (12.0% ROE, leverage 2.0)	=[10]/(1+[22])	60.4%	60.4%	60.4%	60.4%	60.4%	61.6%	61.7%	-	60.0%	60.5%	60.5%	60.3%	60.6
[26]	nominal excess legal LR for Indicated target rate change (12.0% ROE, leverage 2.0)	=[13]*[25]	0.8%	0.8%	0.8%	0.8%	0.8%	-	-	-	-	-	-	-	0.7
[27]	discounted commission as % of premium, based on alternate target	Exh G-1, col[C], row[6]	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00
[28]	Retroactive claims fee adjustment (discounted), based on alternate target	goal seek to 0 on col [L], row 0.684	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10
[29]	Alternate basis Return on Premium (i.e. pre-tax return from underwriting, including associated	Exh H-1, row[21]													1
[30]	investment income, as % of premium) Alternate rate change basis (0.0% Cost of Capital, leverage 1.81)		60.3%	60.3%	60.3%	60.3%	60.3%	71.2%	92.0%	1	(14.3%)	(1.4%)	4.0%	(7.3%)	60.2
[30]	Avg WP @ Alternate rate change basis (0.0% Cost of Capital, leverage 1.81)	=([14]+[16])/([15]-[27]-[18]-[19]-[28]-[29])-1 =[5]*(1+[30])	6,795	60.5%	60.5%	00.5%	6,795	568	332	[751	254	84	904	7,59
	AWP dollar change for Alternate rate change basis (0.0% Cost of Capital, leverage 1.81)	=[5]*(1+[30])	6,795	-	-	-	0,795	308	332	-	/51	234	04	904	7,55
[32]	Avvr dollar change for Alternate rate change basis (0.0% cost of capital, leverage 1.01)	=[31]-[5]	2,556	-	-	-	2,556	236	159	-	(125)	(4)	3	(71)	2,85
[33]	nominal indemnity LR for Alternate rate change basis (0.0% Cost of Capital, leverage 1.81)														
1 1		=[10]/(1+[30])	67.7%	67.7%	67.7%	67.7%	67.7%	69.1%	69.2%	-	67.3%	67.7%	67.9%	67.5%	67.9
[34]	nominal excess legal LR for Alternate rate change basis (0.0% Cost of Capital, leverage 1.81)	=[13]*[33]	0.9%	0.9%	0.9%	0.9%	0.9%	-	-	-	-	-	-	-	0.8
[35]	Rate change selected by FA	Alternate rate change basis (0.0% Cost of													
[55]	•	Capital, leverage 1.81), capped at +/-0.0% by													1
		coverage	24.6%	24.6%	24.6%	24.6%	24.6%	42.2%	50.9%	-	(9.4%)	(2.0%)	(1.3%)	(6.9%)	25.7
[36]	Avg WP @ Rate change selected by FA	=[5]*(1+[35])	5,282	-	-	-	5,282	472	261	-	794	253	80	908	5,9
[37]	AWP dollar change for Rate change selected by FA	=[36]-[5]	1,043	-	-	-	1,043	140	88	-	(82)	(5)	(1)	(67)	1,2
[38]	nominal indemnity LR for Rate change selected by FA	=[10]/(1+[35])	87.2%	87.2%	87.2%	87.2%	87.2%	83.2%	88.1%	-	63.7%	68.2%	71.5%	67.2%	86.6
[39]	nominal excess legal LR for Rate change selected by FA	=[13]*[38]	1.2%	1.2%	1.2%	1.2%	1.2%	-	-	-	-	-	-	-	1.0

Exh C-3 (option 1)

jurisdiction (short form): NL

major rating class: PUB minor rating class: TX rating type: all Exh C-3 (option 1) Page 2 of 2

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Project ID: NL-2016Q1-TX

..\..\proj 2016 Q1\01a indication (coverage)\01e NL 2016 Q1 TX indications - coverage v05.xlsx

Retroactive claims fee adjustment		ment rate LR	ment rate LR	expense fee ratio	ratio		experience claims expense fee ratio	min/max)	Adjustment	discount by 1	discounted retroactive adjustment
	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[1]	[1]	[K]
[IBNR as % ultimate] as per Exh D-1: -0.7%	(see note 1)	Statistical	Accounting & Statistical Manual (see note 2)	Statistical	Statistical	Ctatistical	={co [F], row[40]\+[72	=row[40]:col [H] s.t. max / min, cols [D] & [E]	=[H]-[C]	=1/(1+disc rate)	=[1]*[J]
[40] Retroactive claims fee adjustment at 12.0% ROE	61.0%	67.5%	10.0%	9.0%	16.0%	3.3%	9.4%	9.4%	(0.6%)	0.9961	(0.60%)
[41] Retroactive claims fee adjustment at Alternate Target	68.4%	67.5%	10.0%	9.0%	16.0%	3.3%	10.1%	10.1%	0.1%	0.9961	0.10%
[42] Retroactive claims fee adjustment on Selected Rate Change	87.2%	67.5%	10.0%	9.0%	16.0%	3.3%	12.0%	12.0%	2.0%	0.9961	1.99%

Goal seek to 0.0%, on col[B], row[20]
[L]
0.02%
-

Notes:

[72mth LR] = Recorded Claims Ratio @ 72 months*(1-[IBNR as % ultimate])

1

² See also Bulletin "All-Canada SC2004-02" issued on Jan. 7, 2004

Jurisidiction: Newfoundland & Labrador Vehicle Type: Taxi

Project ID: NL-2016Q4-TX

FA Experience Projected Provincial Loss Ratio (Indemnity Only)

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

Exh D-1 Page 1 of 2

as at:	31-Dec-2015		`	•	FA Ex	perience				Earne	d Premium O	n-Level		Ultima	te Indemnity C	n-Level			
		Earned	Farrad	A = Farmand	December	Lasa Davidas	1114:	1114:	1 II ki k - 1	Earned	Rating	On-Level		Catastrophe	Other	Loss Cost	Trended	Trended	A ! - ! A
Coverage	AY	Exposure	Earned Premium	Avg Earned Premium	Recorded Indemnity	Loss Develop- ment Factor	Ultimate Indemnity	Ultimate Loss Ratio	Costs	Premium Rate On-	Character- istic Drift	Earned	Large Loss Load (%)		Adjustments	Projection	Ultimate	Ultimate Loss	Accident Year Weight
		(excl trailers)		· · · ciiiidiii	c	ment ractor	acy	nacio	COSES	Level Factor	Factor	Premium	2000 (70)	Load (%)	/ Loads (%)	Factor	Losses	Ratio	rear weight
		(1s)	(\$1s)	(\$1s)	(\$1s)		(\$1s)		(\$1s)			(\$1s)					(\$1s)		
		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]
						Est D.2										FA Selected	=[6]*(1+[12])		
		FA AIX	FA AIX	=[2]/[1]	FA AIX	Exh D-2, Section C.	=[4]*[5]	=[6]/[2]	=[6]/[1]	Exh D-3a	Exh D-4a	=[2]*[9]*[10]	input	input	input	Trend Models (Exh	*(1+[13])*(1+	=[16]/[11]	input
						Section C.										D-5b)	[14])*[15]		
TOTAL																/			
	2006	573	1,272,025	2,220	1,529,738		1,529,738	120.3%	2,669.70			3,682,630					2,441,545	66.3%	
	2007	663	1,290,663	1,947	2,217,261		2,408,159	186.6%	3,632.22			3,728,696					3,450,993	92.6%	
	2008	725	1,412,456	1,948	2,388,733		2,362,568	167.3%	3,258.71			4,100,527					3,307,574	80.7%	
	2009 2010	764 780	1,516,679 1,565,401	1,985 2,007	2,520,358 3,216,086		2,520,358 3,239,929	166.2% 207.0%	3,298.90 4,153.76			4,378,900 4,494,689					3,469,884 4,254,025	79.2% 94.6%	
	2010	793	1,587,985	2,007	3,594,184		3,602,098	226.8%	4,542.37			4,599,800					4,604,589	100.1%	20.0%
	2012	816	1,676,159	2,054	4,773,281		4,976,739	296.9%	6,098.94			4,822,335					5,925,230	122.9%	20.0%
	2013	852	1,857,181	2,180	3,333,181		3,464,015	186.5%	4,065.75			5,102,758					4,096,136	80.3%	20.0%
	2014	820	2,394,633	2,920	3,274,881		3,797,464	158.6%	4,631.05			4,934,485					4,415,301	89.5%	20.0%
	2015	795	2,441,126	3,071	3,193,478		4,496,330	184.2%	5,655.76			4,714,264					4,944,191	104.9%	20.0%
	tal/Wtd Avg.	7,581	17,014,308	2,244	30,041,181		32,397,398	190.4%	4,273.50			44,559,084					40,909,468	99.5%	100.0%
TPL (indivisible) TPL (indivis)	2006	573	1,172,997	2,047	1,280,890	1.0000	1,280,890	109.2%	2,235.41	2.7981	1.0123	3,322,534				1.4590	1,868,819	56.2%	
TFL (IIIulvis)	2007	663	1,188,137	1,792	2,109,375		2,300,273	193.6%	3,469.49	2.7981	1.0123	3,362,093		-	-	1.4150	3,254,886	96.8%	-
	2008	725	1,301,390	1,795	2,230,303		2,200,863	169.1%	3,035.67	2.7981	1.0103	3,678,926	_	-	-	1.3722	3,020,024	82.1%	-
	2009	764	1,391,046	1,821	2,283,000	1.0000	2,283,000	164.1%	2,988.22	2.7981	1.0093	3,928,484	-	-	-	1.3307	3,037,988	77.3%	-
	2010	780	1,430,390	1,834	3,074,942		3,098,927	216.6%	3,972.98	2.7981	1.0083	4,035,594	-	-	-	1.2904	3,998,855	99.1%	-
	2011	793	1,462,352	1,844	3,131,221		3,141,241	214.8%	3,961.21	2.7981	1.0073	4,121,677	-	-	-	1.2513	3,930,635	95.4%	20.0%
	2012	816	1,532,990	1,879	4,124,378		4,333,072	282.7%	5,310.14	2.7981	1.0063	4,316,483	-	-	-	1.2134	5,257,750	121.8%	20.0%
	2013 2014	852 820	1,686,983 2,185,608	1,980 2,665	2,985,243 2,659,061		3,088,234 3,195,660	183.1% 146.2%	3,624.69 3,897.15	2.6725 1.9752	1.0053 1.0043	4,532,357 4,335,576		-	-	1.1765 1.1407	3,633,307 3,645,289	80.2% 84.1%	20.0% 20.0%
	2015	795	2,225,223	2,799	2,725,310		3,846,775	172.9%	4,838.71	1.8495	1.0033	4,129,131	_		_	1.1060	4,254,533	103.0%	20.0%
Tot	tal/Wtd Avg.	7,581	15,577,116	2,055	26,603,723		28,768,935	184.7%	3,794.87			39,762,855					35,902,086	96.9%	100.0%
AccBen (indivisible	le)																		
AccBen (indivis	2006	414	17,651	43	78,412		78,412		189.40	11.8323	1.0000	208,852	-	=	-	1.8521	145,227	69.5%	-
	2007 2008	457 519	18,274	40 43	42,457 120,873		42,457 120,873	232.3% 545.9%	92.90 232.90	11.8323 11.8323	1.0000 1.0000	216,223	-	-	-	1.8521 1.8521	78,635	36.4% 85.5%	-
	2008	519	22,140 23,279	43	120,873		100,912	545.9% 433.5%	182.48	11.8323	1.0000	261,967 275,444	-	-	-	1.8521	223,869 186,899	67.9%	-
	2010	582	23,279	40	92,124		92,124	396.9%	158.29	11.8323	1.0000	274,604		-	-	1.8521	170,623	62.1%	-
	2011	611	24,277	40	247,283		250,226		409.54	11.8323	1.0000	287,253	-	=	-	1.2988	324,994	113.1%	20.0%
	2012	639	25,385	40	539,836	0.9903	534,600	2,106.0%	836.62	11.8323	1.0000	300,363	-	-	-	1.0000	534,600	178.0%	20.0%
	2013	693	30,167	44	134,188		156,222	517.9%	225.43	10.8196	1.0000	326,395	-	-	-	1.0000	156,222	47.9%	20.0%
	2014	682	49,100	72	126,606		110,084	224.2%	161.41	6.4530	1.0000	316,842	-	-	-	1.0000	110,084	34.7%	20.0%
Tot	2015 otal/Wtd Avg.	5,825	55,589 289,070	82 50	227,032 1,709,723		363,456 1,849,366	653.8% 639.8%	538.45 317.49	5.5637	1.0000	309,281 2,777,224	<u> </u>			1.0000	363,456 2,294,609	117.5% 98.2%	20.0% 100.0%
Uninsured Autom		3,823	203,070	30	1,703,723	<u> </u>	1,843,300	039.876	317.43			2,777,224					2,294,009	36.276	100.076
UA	2006	570	4,027	7	160,134	1.0000	160,134	3,976.5%	280.94	16.5092	1.0000	66,483		-	-	2.6053	417,197	627.5%	-
	2007	662	4,050	6	37,028		37,028	914.3%	55.93	16.5092	1.0000	66,862	-	-	-	2.4055	89,071	133.2%	-
	2008	719	4,667	6	15,326		18,601	398.6%	25.87	16.5092	1.0000	77,048	-	-	-	2.2284	41,450	53.8%	-
	2009	758	5,162	7	102,310		102,310		134.97	16.5092	1.0000	85,220	-	-	-	2.0610	210,861	247.4%	-
	2010	776	5,266	7	39,573		39,431	748.8%	50.81	16.5092	1.0000	86,937	-	-	-	1.9046	75,100	86.4%	- 20.001
	2011 2012	793 816	5,362 5,532	7	186,322 37,865		181,273 37,865	3,380.7% 684.5%	228.59 46.40	16.5092 16.5092	1.0000 1.0000	88,522 91,329		-	-	1.7631 1.6289	319,602 61,678	361.0% 67.5%	20.0% 20.0%
	2012	854	7,749	9	167,722		172,032	2,220.1%	201.44	15.0962	1.0000	116,980	1 .	-	-	1.5289	259,080	221.5%	20.0%
	2013	826	16,178	20	424,744		427,250		517.25	9.0037	1.0000	145,662		-	-	1.3937	595,458	408.8%	20.0%
	2015	804	18,197	23	115,489		138,621	761.8%	172.41	7.7366	1.0000	140,783				1.2893	178,724	126.9%	20.0%
Tot	tal/Wtd Avg.	7,578	76,190	10	1,286,513		1,314,545	1,725.4%	173.47			965,826					2,248,221	237.1%	100.0%

Facility Association Residual Market (FARM) Jurisidiction: Newfoundland & Labrador Vehicle Type: Taxi

Project ID: NL-2016Q4-TX

FA Experience Projected Provincial Loss Ratio (Indemnity Only)

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

Exh D-1 Page 2 of 2

as a	at: 31-Dec-2015				FA Ex	erience				Earne	d Premium O	n-Level		Ultima	te Indemnity O	n-Level			
Coverage	AY	Earned Exposure (excl trailers)	Earned Premium	Avg Earned Premium	Recorded Indemnity	Loss Develop- ment Factor	Ultimate Indemnity	Ultimate Loss Ratio	Ultimate Loss Costs	Earned Premium Rate On- Level Factor	Rating Character- istic Drift Factor	On-Level Earned Premium	Large Loss Load (%)	Catastrophe Adjustment Load (%)	Other Adjustments / Loads (%)	Loss Cost Projection Factor	Trended Ultimate Losses	Trended Ultimate Loss Ratio	Accident Year Weight
		(1s)	(\$1s)	(\$1s)	(\$1s)		(\$1s)		(\$1s)			(\$1s)					(\$1s)		
		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15] FA Selected	[16] =[6]*(1+[12])	[17]	[18]
		FA AIX	FA AIX	=[2]/[1]	FA AIX	Exh D-2, Section C.	=[4]*[5]	=[6]/[2]	=[6]/[1]	Exh D-3a	Exh D-4a	=[2]*[9]*[10]	input	input	input	Trend Models (Exh D-5b)	*(1+[13])*(1+ [14])*[15]	=[16]/[11]	input
Collision																			
CL	2006	27	31,499	1,167	4,282		4,282		158.59	0.5095	2.1455	34,433	-	-	-	1.0000	4,282	12.4%	-
	2007 2008	24 27	29,936 35,099	1,247 1,300	9,821 11,450	1.0000 1.0000	9,821 11,450	32.8% 32.6%	409.21 424.07	0.5141 0.5141	2.0159 1.8941	31,025 34,178	-	-	-	1.0000 1.0000	9,821 11,450	31.7% 33.5%	- 1
	2009	21	32,294	1,538	1,870		1,870		89.05	0.5141	1.7800	29,552	-	-	-	1.0000	1,870	6.3%	- 1
	2010	28	39,255	1,402	- 1,870	1.0000		-	69.03	0.5270	1.6722	34,593		_	_	1.0000	1,870	0.376	- 1
	2011	36	43,999	1,222	11,380		11,380		316.11	0.5845	1.5711	40,405	_	_	-	1.0000	11,380	28.2%	20.0%
	2012	46	57,659	1,253	4,810		4,810		104.57	0.5916	1.4762	50,355		-	-	1.0000	4,810	9.6%	20.0%
	2013	49	60,424	1,233	16,908		16,685	27.6%	340.51	0.5916	1.3873	49,592	-	-	-	1.0000	16,685	33.6%	20.0%
	2014	51	65,370	1,282	29,723	1.0000	29,723	45.5%	582.80	0.6170	1.3032	52,562	-	-	-	1.0000	29,723	56.5%	20.0%
	2015	64	68,991	1,078	110,888	1.1538	127,943	185.4%	1,999.11	0.6213	1.2245	52,487	_	-	-	1.0000	127,943	243.8%	20.0%
	Total/Wtd Avg.	373	464,526	1,245	201,132		217,964	46.9%	584.35			409,182					217,964	74.3%	100.0%
Comp																			
CM	2006	51	15,158	297	301		301	2.0%	5.90	0.5773	2.0607	18,033	-	-	-	1.0000	301	1.7%	- '
	2007	49	16,229	331	2,312		2,312		47.18	0.5826	1.9426	18,367	-	-	-	1.0000	2,312	12.6%	-
	2008	46	16,090	350	2,086		2,086		45.35	0.5826	1.8312	17,166	-	-	-	1.0000	2,086	12.2%	- 1
	2009 2010	52 62	21,392 24,008	411 387	17,353 2,052		17,353 2,052		333.71 33.10	0.5826 0.6169	1.7266 1.6273	21,519 24,101	-	-	-	1.0000	17,353 2,052	80.6% 8.5%	- 1
	2011	67	19,150	286	1,866		1,866		27.85	0.8024	1.5341	23,573		_	_	1.0000	1,866	7.9%	20.0%
	2012	79	22,343	283	34,001		34,001	152.2%	430.39	0.8299	1.4461	26,814	_	_	_	1.0000	34,001	126.8%	20.0%
	2013	100	28,908	289	8,085		8,085		80.85	0.8299	1.3635	32,711	_	_	_	1.0000	8,085	24.7%	20.0%
	2014	115	33,299	290	25,924		25,924		225.43	0.8596	1.2851	36,784	-	-	-	1.0000	25,924	70.5%	20.0%
	2015	127	40,213	317	1,382	0.9419	1,302	3.2%	10.25	0.8368	1.2115	40,767	-	-	-	1.0000	1,302	3.2%	20.0%
	Total/Wtd Avg.	748	236,790	317	95,362		95,282	40.2%	127.38			259,835					95,282	46.6%	100.0%
Specified Per	rils																		
SP	2006	164	29,892	182	5,719		5,719		34.87	0.5094	2.0607	31,378	-	-	-	1.0000	5,719	18.2%	- '
	2007	224	32,516	145	10,786		10,786		48.15	0.5141	1.9426	32,473	-	-	-	1.0000	10,786	33.2%	-
	2008	219	31,706	145	8,695		8,695		39.70	0.5141	1.8312	29,849	-	-	-	1.0000	8,695	29.1%	- '
	2009	254	42,622	168	14,913		14,913		58.71	0.5141	1.7266	37,833	1	-	-	1.0000	14,913	39.4%	-
	2010 2011	249 241	41,744 30,887	168 128	7,395 16,112		7,395 16,112		29.70 66.85	0.5510 0.7672	1.6273 1.5341	37,429 36,353		-	-	1.0000 1.0000	7,395 16,112	19.8% 44.3%	20.0%
	2011	235	29,843	128	32,391		32,391	108.5%	137.83	0.7672	1.5341	34,611	1	-	-	1.0000	32,391	93.6%	20.0%
	2012	233	29,306	127	15,038		16,760		72.55	0.8020	1.3635	32,047		=	-	1.0000	16,760	52.3%	20.0%
	2013	220	27,075	127	15,036	1.5941	10,760	37.270	- /2.55	0.8824	1.2851	30,702		-	-	1.0000	16,760	52.5%	20.0%
	2015	227	25,640	113	13,377	1.3630	18,233		80.32	1.1475	1.2115	35,645		_	-	1.0000	18,233	51.2%	20.0%
	Total/Wtd Avg.	2,264	321,231	142			131,004	40.8%	57.86	===175		338,320					131,004	48.3%	100.0%

Facility Association Residual Market (FARM)
Jurisidiction: Newfoundland & Labrador
Vehicle Type: Taxi

Project ID: NL-2016Q4-TX

Exh D-2

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all Exh D-2 Page 1 of 1

Part	Loss Develo	pment Factors	;		Val Market:	FARM	,	/al Jurisdiction	: NL	Val Bu	siness Segment:	non-PPV						
Marche Month policy Damage Color Damage Color Damage Color Damage Damage	as at:	30-Jun-2016	A. Selected Ult	imate Indemnity	y by Minor Cov	erage Type												
Part		Accident Year	Bodily Injury		DCPD			•	Death Benefits		Supp. AccBen				Collision	Comp		All Perils
Fabril F	•		[1]		[3]				[7]	•	[9]				[13]	[14]		[16]
			2016 Q2	2016 Q2	2016 Q2		2016 Q2	2016 Q2	2016 Q2	2016 Q2	2016 Q2	2016 Q2	2016 Q2	2016 Q2	2016 Q2	2016 Q2	2016 Q2	2016 Q2
1,991,055 391,058 1,991,055 1,991,		(\$1s)	FARM	FARM	FARM	=sum([1]to[3])	FARM	FARM	FARM	FARM	FARM	FARM	FARM	FARM	FARM	FARM	FARM	FARM
2007 3,336,883 501,261 3,858,144 40,905 3,257,506 40,200 40,200 40,200 40,200 40,200 40,200 40,200 40,2	_		valuation	valuation	valuation		valuation	valuation	valuation	valuation	valuation	valuation	valuation	valuation	valuation	valuation	valuation	valuation
2008 2,812,660 371,054 46,409 5 2,957,96 46,111,409 4,275,709 4,211,409		2006	1,499,055	391,038	-	1,890,093						135,493	160,134	-	52,425	126,062	107,028	86,489
2009		2007	3,336,883	501,261	-	3,838,144						100,304	39,019	-	86,000	83,114	80,996	89,814
2010					-									-				
2011 3,874,237 783,195 -				,											,			,
2012 5,222,875 616,466 6,633,268 1.80 1																		
2013 3,416,866 \$15,622 3,332,866																		
2014 4,034,938 748,724 1				,		, ,								,	,	,		,
				,	-								,	,	,			
Maganaba Al-Dec-2015 Backeded Indemmity by Minor-Coverage Type Foreign Forei					-													
Accident Year Bodily Injury Property Property Property Property Property Propenses P	-	2015	4,838,060	857,431	-	5,695,491						811,412	184,292	19,000	278,013	125,929	105,681	494,385
Accident Year Bodily Injury Damage DCPD Injury Damage DCPD Injury Damage DCPD Injury DCPD Injury DCPD DCP	diagonal:	31-Dec-2015	B. Recorded In	demnity by Min	or Coverage Ty	pe												
Company Comp		Accident Vear	Rodily Injury	Property	DCBD	TPL	Medical	Disability	Death Benefits	Funeral	Sunn AccRen	AccBen	Uninsured	Underinsured	Collision	Comp		All Parils
		Accident real																
PARIO DEST PAR		(\$1s)																
2007 3,018,330 501,261	•				FARM Data						FARM Data							
2008 2,855,312 371,054 - 3,226,366 127,209 32,856 - 1,000 - 161,065 41,032 14,000 100,812 20,439 32,767 46,266 2009 2,531,941 464,019 - 2,995,960 119,184 44,748 161,065 41,032 14,000 10,0812 20,439 32,767 46,266 2010 3,619,834 459,985 - 4,079,819 135,990 173,118 13,000 1,000 - 323,108 227,955 500,150 36,290 7,541 37,965 69,890 1001 3,895,524 739,195 - 4,598,719 203,518 113,471 - 1,000 - 337,989 248,279 - 52,393 228,554 149,787 35,728 2013 3,275,842 525,622 - 3,801,664 164,042 33,042 10,000 1,000 - 208,084 179,122 - 178,484 70,920 61,131 37,462 2015 3,252,141 783,005 - 4,035,146 445,312 60,541 - 1,000 - 506,853 153,534 - 240,953 133,693 77,536 531,139 2015 3,252,141 783,005 - 4,035,146 445,312 60,541 - 1,000 - 506,853 153,534 - 240,953 133,693 77,536 531,139 2016 20				,			,						,		,	,		
2009 2,531,941 464,019 - 2,995,960 119,184 44,748 - - - 163,932 102,310 - 65,577 96,295 29,002 18,724 2010 3,619,834 459,935 - 4,798,119 135,990 173,118 13,000 1,000 - 323,108 237,955 50,150 36,290 7,541 37,965 69,895 2011 3,895,524 739,195 - 4,598,719 203,518 113,471 - 1,000 - - 628,387 37,865 - 176,844 134,406 139,454 50,445 2014 3,236,684 743,406 - 3,380,1464 164,042 33,904 210,000 1,000 - 208,084 179,122 - 177,848 70,920 61,131 37,462 10,000 1,000 - 20,000 - 247,038 469,744 - 125,130 81,905 37,028 21,534 21,5				,				,		,								
2010 3,619,834 459,985 - 4,079,819 315,999 173,118 13,000 1,000 - 313,108 237,955 500,150 36,200 7,511 37,965 69,890 2012 5,602,103 622,054 - 6,224,157 2014,03 46,984 - - - 628,387 37,865 - 176,944 134,406 139,454 50,445 2013 3,275,842 525,622 - 3,801,464 164,042 33,042 10,000 1,000 - 200,00 - 200,00 - 200,00 - 179,122 - 178,484 70,920 61,131 37,462 2015 3,252,141 783,005 - 4,035,146 445,312 60,541 - 1,000 - 200,00 - 200,00 - 200,00 - 200,00 - 200,00 - 200,00 - 200,00 - 200,00 - 200,00 - 200,00 - 200,00 - 200,000 - 200,00											-							
2011 3,859,524 739,195 - 4,598,719 203,188 113,471 - 1,000 - 317,989 248,279 - 5,2393 289,554 149,787 35,728 2013 3,275,842 525,622 - 3,801,464 164,042 33,042 10,000 1,000 - 208,084 179,122 - 178,484 70,920 61,151 37,462 2014 3,236,584 743,406 - 3,980,090 149,167 95,871 - 2,000 - 247,038 469,744 - 125,130 81,905 37,028 21,534											-							
2012 5,602,103 622,054 - 6,224,157 201,403 426,984 - - - 628,387 37,865 - 176,944 134,406 139,454 50,445				,						,			,	500,150	,			
2013 3,275,842 525,622 - 3,801,464 164,042 33,042 10,000 1,000 - 208,084 179,122 - 178,484 70,920 61,131 37,462											-			-				
2014 3,236,684 743,406 - 3,980,090 149,167 95,871 - 2,000 - 247,038 469,744 - 125,130 81,905 37,028 21,534 37,028 21,534 37,028 37,								,			-			-				
2015 3,252,141 783,005 4,035,146 445,312 60,541 - 1,000 - 506,853 153,534 - 240,953 133,693 77,536 531,139									•					-				
Accident Year Bodily Injury Property DCPD Damage DCPD (indivisible) Expenses Income Expenses Income Damage Information Expenses Income Damage Information Expenses Income Damage Information Expenses Income Damage Information Informatio									-	,			,	-				
Accident Year Bodily Injury Property Damage DCPD TPL (indivisible) Expenses Income Expenses Income Death Benefits Expenses Sup. AccBen (indivisible) Expenses Sup. AccBen (indivisible) Automobile	-	2013	3,232,141	783,003		4,033,140	443,312	00,341		1,000		300,833	133,334		240,333	133,033	77,550	331,133
Accident Year Bodily Injury Damage DCPD (Indivisible) Expenses Income Death Benefits Expenses Supp. AccBen (Indivisible) Automobile Motorist Collision Comp Perils All Perils			C. Implied Loss	Development F	actor													
Company Comp		Accident Year	Bodily Injury		DCPD				Death Benefits		Supp. AccRen				Collision	Comp		All Perils
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		7.00100111 1001									• • • • • • • • • • • • • • • • • • • •							
$ \frac{7] - 0, [36], [1]/[8] = 0, [36], [2]/[9] = 0, [36], [3]/[9] = [4]/[20] \\ 17]) 18]) 19]) 21]) 22]) 23]) 24]) 25])}{21]) 22]) 23]) 24]) 25]) [11]/[27]) [12]/[28]) [13]/[29] = [14]/[30] = [15]/[31] = [16]/[32] \\ [11]/[27]) [12]/[28]) [13]/[29] [13]/[29] [14]/[30] = [15]/[31] = [16]/[32] \\ [11]/[27]) [12]/[28]) [13]/[29] [13]/[29] [14]/[30] = [15]/[31] = [16]/[32] \\ [11]/[27]) [12]/[28]) [13]/[29] [14]/[30] [15]/[31] [16]/[32] \\ [11]/[27]) [12]/[28]) [13]/[29] [14]/[30] [15]/[31] [16]/[32] \\ [11]/[27]) [12]/[28]) [13]/[29] [14]/[30] [15]/[31] [16]/[32] \\ [11]/[27]) [12]/[28]) [13]/[29] [14]/[30] [15]/[31] [16]/[32] \\ [11]/[27]) [12]/[28]) [13]/[29] [14]/[30] [15]/[31] [16]/[32] \\ [11]/[27]) [12]/[28]) [13]/[29] [14]/[30] [15]/[31] [16]/[32] \\ [11]/[27]) [12]/[28]) [13]/[29] [14]/[30] [15]/[31] [16]/[32] \\ [11]/[27]) [12]/[28]) [13]/[29] [14]/[30] [15]/[31] [16]/[32] \\ [11]/[27]) [12]/[28]) [13]/[29] [14]/[30] [15]/[31] [16]/[32] \\ [11]/[27]) [12]/[28]) [12]/[28]) [13]/[29] [14]/[30] [15]/[31] [16]/[31] \\ [11]/[27]) [12]/[28]) [12]/[28]) [13]/[29] [14]/[30] [16]/[31] \\ [11]/[27]) [12]/[28]) [13]/[29] [14]/[30] [16]/[31] \\ [11]/[27]) [12]/[28]) [13]/[29] [14]/[30] [16]/[31] \\ [11]/[27]) [12]/[28]) [13]/[29] [14]/[30] [16]/[2]/[29] \\ [12]/[28]) [10]/[29] $						[36]						[42]	[43]	[44]	[45]	[46]	[47]	[48]
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$													=if([27]=0,[42],	=if([28]=0,[33],				
1/1 18 19 21 22 23 24 25 25 24 25 25 25 25						=[4]/[20]						=[10]/[26]			=[13]/[29]	=[14]/[30]	=[15]/[31]	=[16]/[32]
2007 1.1055 1.0000 1.0905 1.0000 <th></th> <th>2005</th> <th></th> <th></th> <th></th> <th>4 0000</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>4 0000</th> <th></th> <th></th> <th>1 0000</th> <th>4 0000</th> <th>1 0000</th> <th>4 0000</th>		2005				4 0000						4 0000			1 0000	4 0000	1 0000	4 0000
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2011 1.0038 1.0000 1.0032 1.0032 1.0119																		
2012 1.0573 0.9909 1.0506 1.0506 0.9903 0.9903 0.9903 0.9903 0.9903 0.9903 1.0000 1.0500 1.0573 1.0000 1.0000 1.0000 1.0000 2013 1.0430 0.9810 1.0345 1.0345 1.1642 1.1642 1.1642 1.1642 1.1642 1.1642 1.1642 1.0257 1.0430 0.9868 1.0000 1.1145 1.0000 2014 1.2466 1.0065 1.2018 0.8695 0.869																		
2013 1.0430 0.9810 1.0345 1.0345 1.1642 1.1642 1.1642 1.1642 1.1642 1.1642 1.1642 1.0257 1.0430 0.9868 1.0000 1.1145 1.0000 2014 1.2466 1.0055 1.2018 0.8695 0.8695 0.8695 0.8695 0.8695 0.8695 0.8695 0.8695 0.8695 0.8695 1.0059 1.2466 1.0000 1.0000 1.5941 1.0000																		
2014 1.2466 1.0065 1.2018 1.2018 0.8695 0.8695 0.8695 0.8695 0.8695 0.8695 1.0059 1.2466 1.0000 1.0000 1.5941 1.0000																		

Vehicle Type: Taxi Project ID: NL-2016Q4-TX

Exh D-3a

Earned Premium

Summary - Earned Premium On-level Factors

Premium as at: 31-Dec-2015
(\$1s) unless otherwise indicated

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all Exh D-3a Page 1 of 2

(512)	unless otherwis	e muicateu																
Accident Year	Bodily Injury	Property	DCPD	AccBen	Uninsured	Underinsured	Collision	Comp	Specified	TPL		Medical	Disability	Death Benefits	Funeral	Supp. AccBen	All Perils	Total
- recident rear	bouny mjury	Damage	50.5	(indivisible)	Automobile	Motorist	Complete	comp	Perils	(indivisil	ole)	Expenses	Income	Death Denemo	Expenses			
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]		[11]	[12]	[13]	[14]	[15]	[16]	[17]
	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM A	dΧ	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	=sum([1] to
	data	data	data	data	data	data	data	data	data	data		data	data	data	data	data	data	[16])
2006	-	-	-	17,651	4,027	-	31,499	15,158	29,892	1,172	,997	-	-	-	-	-	801	1,272,025
2007	-	-	-	18,274	4,050	-	29,936	16,229	32,516	1,188	,137	-	-	-	-	-	1,521	1,290,663
2008	-	-	-	22,140	4,667	-	35,099	16,090	31,706	1,301	,390	-	-	-	-	-	1,364	1,412,456
2009	-	-	-	23,279	5,162	-	32,294	21,392	42,622	1,391	,046	-	-	-	-	-	884	1,516,679
2010	-	-	-	23,208	5,266	-	39,255	24,008	41,744	1,430	,390	-	-	-	-	-	1,530	1,565,401
2011	-	-	-	24,277	5,362	-	43,999	19,150	30,887	1,462	,352	-	-	-	-	-	1,958	1,587,985
2012	-	-	-	25,385	5,532	-	57,659	22,343	29,843	1,532	,990	-	-	-	-	-	2,407	1,676,159
2013	-	-	-	30,167	7,749	-	60,424	28,908	29,306	1,686	,983	-	-	-	-	-	13,644	1,857,181
2014	-	-	-	49,100	16,178	-	65,370	33,299	27,075	2,185	,608	-	-	-	-	-	18,003	2,394,633
2015	-	-	-	55,589	18,197	(1)	68,991	40,213	25,640	2,225	,223	-	-	-	-	-	7,274	2,441,126
2016	-	-	-	55,589	18,197	(1)	68,991	40,213	25,640	2,225	,223	-	-	-	-	-	7,274	2,441,126
2017	-	-	-	55,589	18,197	(1)	68,991	40,213	25,640	2,225	,223	-	-	-	-	-	7,274	2,441,126
2018	-	-	-	55,589	18,197	(1)	68,991	40,213	25,640	2,225	,223	-	-	-	-	-	7,274	2,441,126
2019	-	-	-	55,589	18,197	(1)	68,991	40,213	25,640	2,225	,223	-	-	-	-	-	7,274	2,441,126

Earned Rate In	dices - 12 month	policies															
Accident Year	Bodily Injury	Property Damage	DCPD	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils	TPL (indivisible)	Medical Expenses	Disability Income	Death Benefits	Funeral Expenses	Supp. AccBen	All Perils	Total
	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	[32]	[33]
	Rate Level Exhibit	Rate Level Exhibit	Rate Level Exhibit	Rate Level Exhibit	Rate Level Exhibit	Rate Level Exhibit	Rate Level Exhibit	Rate Level Exhibit	Rate Level Exhibit	=prior AY Index *(1+[42] AY chg)	=[20]	=[20]	=[20]	=[20]	=[20]	=2/3*[23] +1/3*[24]	=average([25] to)
2006	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3855	0.4698	0.9194	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.4140	0.9762
2007	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3820	0.4655	0.9110	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.4100	0.9760
2008	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3820	0.4655	0.9110	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.4100	0.9760
2009	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3820	0.4655	0.9110	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.4100	0.9765
2010	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3727	0.4396	0.8499	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3950	0.9711
2011	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3360	0.3380	0.6104	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3370	0.9652
2012	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3320	0.3268	0.5839	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3300	0.9597
2013	1.0468	1.0468	1.0468	1.0936	1.0936	1.0000	0.3320	0.3268	0.5839	1.0470	1.0936	1.0936	1.0936	1.0936	1.0936	0.3300	1.0009
2014	1.4168	1.4168	1.4168	1.8336	1.8336	1.0000	0.3183	0.3155	0.5307	1.4166	1.8336	1.8336	1.8336	1.8336	1.8336	0.3170	1.3644
2015	1.5128	1.5128	1.5128	2.1267	2.1339	1.0000	0.3161	0.3241	0.4081	1.5129	2.1267	2.1267	2.1267	2.1267	2.1267	0.3190	1.4629
2016	1.7863	1.7863	1.7863	4.6383	5.2123	1.0000	0.2820	0.3181	0.4015	1.7867	4.6383	4.6383	4.6383	4.6383	4.6383	0.2940	1.7915
2017	2.4037	2.4037	2.4037	9.2799	12.4361	1.0000	0.2140	0.2775	0.4585	2.4049	9.2799	9.2799	9.2799	9.2799	9.2799	0.2350	2.5124
2018	2.7877	2.7877	2.7877	11.7831	16.4312	1.0000	0.1967	0.2713	0.4684	2.7897	11.7831	11.7831	11.7831	11.7831	11.7831	0.2220	2.9494
2019	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.1964	0.2712	0.4683	2.7981	11.8323	11.8323	11.8323	11.8323	11.8323	0.2210	2.9587
									n Oct 21 2016	-	•				•		

as per file on Oct 31, 2016

Vehicle Type: Taxi Project ID: NL-2016Q4-TX

Exh D-3a

Summary - Earned Premium On-level Factors

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

Exh D-3a Page 2 of 2

Estimated Earn	ed Rate Change	!							
Accident Year	Bodily Injury	Property Damage	DCPD	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils
	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]
	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level
	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit
2006									
2007	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(0.9%)	(0.9%)	(0.9%)
2008	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2009	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2010	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(2.4%)	(5.6%)	(6.7%)
2011	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(9.8%)	(23.1%)	(28.2%)
2012	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(1.2%)	(3.3%)	(4.3%)
2013	4.7%	4.7%	4.7%	9.4%	9.4%	0.0%	0.0%	0.0%	0.0%
2014	35.3%	35.3%	35.3%	67.7%	67.7%	0.0%	(4.1%)	(3.5%)	(9.1%)
2015	6.8%	6.8%	6.8%	16.0%	16.4%	0.0%	(0.7%)	2.7%	(23.1%)
2016	18.1%	18.1%	18.1%	118.1%	144.3%	0.0%	(10.8%)	(1.9%)	(1.6%)
2017	34.6%	34.6%	34.6%	100.1%	138.6%	0.0%	(24.1%)	(12.8%)	14.2%
2018	16.0%	16.0%	16.0%	27.0%	32.1%	0.0%	(8.1%)	(2.2%)	2.2%
2019	0.3%	0.3%	0.3%	0.4%	0.5%	0.0%	(0.2%)	0.0%	0.0%

TPL (indivisible)	Medical Expenses	Disability Income	Death Benefits	Funeral Expenses	Supp. AccBen	All Perils
[42]	[43]	[44]	[45]	[46]	[47]	[48]
=average([41] to [35])	=[36]	=[36]	=[36]	=[36]	=[36]	=average([39] to [40]
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(0.9%)
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(4.0%)
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(16.5%)
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(2.3%)
4.7%	9.4%	9.4%	9.4%	9.4%	9.4%	0.0%
35.3%	67.7%	67.7%	67.7%	67.7%	67.7%	(3.8%)
6.8%	16.0%	16.0%	16.0%	16.0%	16.0%	1.0%
18.1%	118.1%	118.1%	118.1%	118.1%	118.1%	(6.4%)
34.6%	100.1%	100.1%	100.1%	100.1%	100.1%	(18.5%)
16.0%	27.0%	27.0%	27.0%	27.0%	27.0%	(5.2%)
0.3%	0.4%	0.4%	0.4%	0.4%	0.4%	(0.1%)

1	Earned Rate
	Change
	[34]
9]	= col[33], % AY
	chg
1	
%)	(0.1%)
%	0.0%
%	0.0%
%)	(0.3%)
%)	(1.1%)
%)	(0.2%)
%	4.5%
%)	33.8%
%	6.5%
%)	19.9%
%)	34.1%
%)	15.2%
%)	0.3%

Earned Premium Rate On-Level Factor to 2019

Accident Year	Bodily Injury	Property Damage	DCPD	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils
	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]
	=[17], [AY	=[18], [AY	=[19], [AY	=[20], [AY	=[21], [AY	=[22], [AY	=[23], [AY	=[24], [AY	=[25], [AY
	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY
2006	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5095	0.5773	0.509
2007	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5141	0.5826	0.514
2008	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5141	0.5826	0.514
2009	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5141	0.5826	0.514
2010	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5270	0.6169	0.551
2011	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5845	0.8024	0.767
2012	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5916	0.8299	0.802
2013	2.6704	2.6704	2.6704	10.8196	15.0962	1.0000	0.5916	0.8299	0.802
2014	1.9730	1.9730	1.9730	6.4530	9.0037	1.0000	0.6170	0.8596	0.882
2015	1.8478	1.8478	1.8478	5.5637	7.7366	1.0000	0.6213	0.8368	1.147
2016	1.5649	1.5649	1.5649	2.5510	3.1674	1.0000	0.6965	0.8526	1.166
2017	1.1630	1.1630	1.1630	1.2750	1.3275	1.0000	0.9178	0.9773	1.021
2018	1.0028	1.0028	1.0028	1.0042	1.0047	1.0000	0.9985	0.9996	0.999
2019	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000

TPL	Medical	Disability	Death Benefits	Funeral	Cunn AssBon	All Perils	Total
(indivisible)	Expenses	Income	Death Benefits	Expenses	Supp. AccBen	All Perils	TOTAL
[42]	[43]	[44]	[45]	[46]	[47]	[48]	[49]
=[26], [AY	=[27], [AY	=[28], [AY	=[29], [AY	=[30], [AY	=[31], [AY	=[32], [AY	=[33], [AY
2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY
2.7981	11.8323	11.8323	11.8323	11.8323	11.8323	0.5338	3.0308
2.7981	11.8323	11.8323	11.8323	11.8323	11.8323	0.5390	3.0315
2.7981	11.8323	11.8323	11.8323	11.8323	11.8323	0.5390	3.0315
2.7981	11.8323	11.8323	11.8323	11.8323	11.8323	0.5390	3.0299
2.7981	11.8323	11.8323	11.8323	11.8323	11.8323	0.5595	3.0468
2.7981	11.8323	11.8323	11.8323	11.8323	11.8323	0.6558	3.0654
2.7981	11.8323	11.8323	11.8323	11.8323	11.8323	0.6697	3.0829
2.6725	10.8196	10.8196	10.8196	10.8196	10.8196	0.6697	2.9560
1.9752	6.4530	6.4530	6.4530	6.4530	6.4530	0.6972	2.1685
1.8495	5.5637	5.5637	5.5637	5.5637	5.5637	0.6928	2.0225
1.5661	2.5510	2.5510	2.5510	2.5510	2.5510	0.7517	1.6515
1.1635	1.2750	1.2750	1.2750	1.2750	1.2750	0.9404	1.1776
1.0030	1.0042	1.0042	1.0042	1.0042	1.0042	0.9955	1.0032
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Total
[49]
=[33], [AY
2019]/AY
3.0308
3.0315
3.0315
3.0299
3.0468
3.0654
3.0829
2.9560
2.1685
2.0225
1.6515

Vehicle Type: Taxi Project ID: NL-2016Q4-TX

Exh D-3b

Summary - Written Premium On-level Factors

/ritten Premium as at: 31-Dec-2015

(\$1s) unless otherwise indicated

Accident Year	Bodily Injury	Property	DCPD	AccBen	Uninsured	Underinsured	Collision	Comp	Specified
Accident real	Boully Illjuly	Damage	DCFD	(indivisible)	Automobile	Motorist	Collision	Comp	Perils
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX
	data	data	data	data	data	data	data	data	data
2006	-	-	-	17,884	3,931	-	31,723	13,856	31,602
2007	-	-	-	19,153	4,204	-	29,604	16,155	31,438
2008	-	-	-	24,558	5,151	-	38,494	19,141	34,913
2009	-	-	-	22,588	5,298	-	31,645	23,907	47,379
2010	-	-	-	23,411	5,284	-	39,378	21,151	35,271
2011	-	-	-	25,098	5,460	-	50,086	19,359	30,383
2012	-	-	-	25,941	5,556	-	62,707	26,203	28,474
2013	-	-	-	40,183	12,330	-	62,264	32,541	29,667
2014	-	-	-	51,399	17,095	-	63,561	35,397	24,879
2015	-	-	-	69,678	22,902	(25)	72,115	40,688	25,632
2016	-	-	-	69,678	22,902	(25)	72,115	40,688	25,632
2017	-	-	-	69,678	22,902	(25)	72,115	40,688	25,632
2018	-	-	-	69,678	22,902	(25)	72,115	40,688	25,632
2019	-	-	-	69,678	22,902	(25)	72,115	40,688	25,632

TPL	Medical	Disability		Funeral			
(indivisible)	Expenses	Income	Death Benefits	Expenses	Supp. AccBen	All Perils	Total
[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]
FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	FARM AIX	=sum([1] to
data	data	data	data	data	data	data	[16])
1,163,673	-	-	-	-	-	1,697	1,264,366
1,201,270	-	-	-	-	-	1,632	1,303,456
1,402,037	-	-	-	-	-	595	1,524,889
1,442,506	-	-	-	-	-	971	1,574,294
1,445,074	-	-	-	-	-	2,481	1,572,050
1,490,987	-	-	-	-	-	822	1,622,195
1,543,316	-	-	-	-	-	5,638	1,697,835
1,955,306	-	-	-	-	-	20,118	2,152,409
2,189,834	-	-	-	-	-	13,218	2,395,383
2,280,282	-	-	-	-	-	2,198	2,513,470
2,280,282	-	-	-	-	-	2,198	2,513,470
2,280,282	-	-	-	-	-	2,198	2,513,470
2,280,282	-	-	-	-	-	2,198	2,513,470
2,280,282	-	-	-	-	-	2,198	2,513,470

jurisdiction (short form): NL

major rating class: PUB

rating type: all

minor rating class: TX

Written Rate Indices - 12 month policies

Accident Year	Bodily Injury	Property Damage	DCPD	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils
	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]
	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level
	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit
2006	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3820	0.4655	0.9110
2007	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3820	0.4655	0.9110
2008	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3820	0.4655	0.9110
2009	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3820	0.4655	0.9110
2010	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3511	0.3798	0.7088
2011	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3320	0.3268	0.5839
2012	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3320	0.3268	0.5839
2013	1.2066	1.2066	1.2066	1.4131	1.4131	1.0000	0.3320	0.3268	0.5839
2014	1.5000	1.5000	1.5000	2.0000	2.0000	1.0000	0.3104	0.3125	0.4529
2015	1.5700	1.5700	1.5700	2.6925	2.7322	1.0000	0.3113	0.3278	0.3958
2016	2.0338	2.0338	2.0338	6.6960	8.2414	1.0000	0.2453	0.2967	0.4253
2017	2.6979	2.6979	2.6979	11.2118	15.5252	1.0000	0.2000	0.2722	0.4694
2018	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.1964	0.2712	0.4683
2019	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.1964	0.2712	0.4683

TPL (indivisible)	Medical Expenses	Disability Income	Death Benefits	Funeral Expenses	Supp. AccBen	All Perils	Total
[26]	[27]	[28]	[29]	[30]	[31]	[32]	[33]
=prior AY Index *(1+[42] AY chg)	=[20]	=[20]	=[20]	=[20]	=[20]	=2/3*[23] +1/3*[24]	=average([25] to)
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.4100	0.9756
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.4100	0.9765
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.4100	0.9754
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.4100	0.9764
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3610	0.9679
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3300	0.9632
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3300	0.9557
1.2070	1.4131	1.4131	1.4131	1.4131	1.4131	0.3300	1.1566
1.5003	2.0000	2.0000	2.0000	2.0000	2.0000	0.3110	1.4480
1.5708	2.6925	2.6925	2.6925	2.6925	2.6925	0.3170	1.5431
2.0342	6.6960	6.6960	6.6960	6.6960	6.6960	0.2620	2.1226
2.6994	11.2118	11.2118	11.2118	11.2118	11.2118	0.2240	2.9164
2.7966	11.8323	11.8323	11.8323	11.8323	11.8323	0.2210	3.0306
2.7966	11.8323	11.8323	11.8323	11.8323	11.8323	0.2210	3.0306

as per file on Oct 31, 2016

Exh D-3b Page 1 of 2

Vehicle Type: Taxi Project ID: NL-2016Q4-TX

Exh D-3b

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

Exh D-3b Page 2 of 2

Summary - Written Premium On-level Factors

Accident Year	Bodily Injury	Property Damage	DCPD	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils
	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]
	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level	Rate Level
	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit	Exhibit
2006									
2007	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2008	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2009	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2010	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(8.1%)	(18.4%)	(22.2%
2011	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(5.4%)	(14.0%)	(17.6%
2012	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2013	20.7%	20.7%	20.7%	41.3%	41.3%	0.0%	0.0%	0.0%	0.0%
2014	24.3%	24.3%	24.3%	41.5%	41.5%	0.0%	(6.5%)	(4.4%)	(22.4%
2015	4.7%	4.7%	4.7%	34.6%	36.6%	0.0%	0.3%	4.9%	(12.6%
2016	29.5%	29.5%	29.5%	148.7%	201.6%	0.0%	(21.2%)	(9.5%)	7.5%
2017	32.7%	32.7%	32.7%	67.4%	88.4%	0.0%	(18.5%)	(8.3%)	10.4%
2018	3.6%	3.6%	3.6%	5.5%	6.3%	0.0%	(1.8%)	(0.4%)	(0.2%
2019	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

TPL	Medical	Disability	Death Benefits	Funeral	Supp. AccBen	All Perils
(indivisible)	Expenses	Income	Death benefits	Expenses	эцрр. Ассьен	All Ferils
[42]	[43]	[44]	[45]	[46]	[47]	[48]
=average([41]	-[26]	-[36]	-[26]	-[36]	-[36]	=average([39]
to [35])	=[36]	=[36]	=[36]	=[36]	=[36]	to [40]
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(13.3%)
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(9.7%)
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
20.7%	41.3%	41.3%	41.3%	41.3%	41.3%	0.0%
24.3%	41.5%	41.5%	41.5%	41.5%	41.5%	(5.5%)
4.7%	34.6%	34.6%	34.6%	34.6%	34.6%	2.6%
29.5%	148.7%	148.7%	148.7%	148.7%	148.7%	(15.4%)
32.7%	67.4%	67.4%	67.4%	67.4%	67.4%	(13.4%)
3.6%	5.5%	5.5%	5.5%	5.5%	5.5%	(1.1%)
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

ls	Written Rate	
15	Change	
	[34]	
[39]	= col[33], % AY	
	chg	
.0%	0.0%	
.0%	0.0%	
.0%	0.0%	
.3%)	(1.0%)	
.7%)	(0.7%)	
.0%	0.0%	
.0%	19.8%	
.5%)	22.9%	
.6%	5.5%	
.4%)	32.0%	
.4%)	31.8%	
.1%)	3.4%	
.0%	0.0%	

Written Premium Rate On-Level Factor to 2019

Accident Year	Bodily Injury	Property Damage	DCPD	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils
	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]
	=[17], [AY	=[18], [AY	=[19], [AY	=[20], [AY	=[21], [AY	=[22], [AY	=[23], [AY	=[24], [AY	=[25], [AY
	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY
2006	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5141	0.5826	0.514
2007	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5141	0.5826	0.514
2008	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5141	0.5826	0.514
2009	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5141	0.5826	0.514
2010	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5594	0.7141	0.660
2011	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5916	0.8299	0.802
2012	2.7954	2.7954	2.7954	11.8323	16.5092	1.0000	0.5916	0.8299	0.802
2013	2.3168	2.3168	2.3168	8.3733	11.6830	1.0000	0.5916	0.8299	0.802
2014	1.8636	1.8636	1.8636	5.9162	8.2546	1.0000	0.6327	0.8678	1.034
2015	1.7805	1.7805	1.7805	4.3945	6.0425	1.0000	0.6309	0.8273	1.183
2016	1.3745	1.3745	1.3745	1.7671	2.0032	1.0000	0.8007	0.9141	1.101
2017	1.0361	1.0361	1.0361	1.0553	1.0634	1.0000	0.9820	0.9963	0.997
2018	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000
2019	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000

TPL	Medical	Disability	Death Benefits	Funeral	Supp. AccBen	All Perils	Total
(indivisible)	Expenses	Income	Death Belletits	Expenses	зирр. Ассвен	All Fellis	Total
[42]	[43]	[44]	[45]	[46]	[47]	[48]	[49]
=[26], [AY	=[27], [AY	=[28], [AY	=[29], [AY	=[30], [AY	=[31], [AY	=[32], [AY	=[33], [AY
2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY	2019]/AY
2.7966	11.8323	11.8323	11.8323	11.8323	11.8323	0.5390	3.1064
2.7966	11.8323	11.8323	11.8323	11.8323	11.8323	0.5390	3.1035
2.7966	11.8323	11.8323	11.8323	11.8323	11.8323	0.5390	3.1070
2.7966	11.8323	11.8323	11.8323	11.8323	11.8323	0.5390	3.1039
2.7966	11.8323	11.8323	11.8323	11.8323	11.8323	0.6122	3.1311
2.7966	11.8323	11.8323	11.8323	11.8323	11.8323	0.6697	3.1464
2.7966	11.8323	11.8323	11.8323	11.8323	11.8323	0.6697	3.1711
2.3170	8.3733	8.3733	8.3733	8.3733	8.3733	0.6697	2.6203
1.8640	5.9162	5.9162	5.9162	5.9162	5.9162	0.7106	2.0930
1.7804	4.3945	4.3945	4.3945	4.3945	4.3945	0.6972	1.9640
1.3748	1.7671	1.7671	1.7671	1.7671	1.7671	0.8435	1.4278
1.0360	1.0553	1.0553	1.0553	1.0553	1.0553	0.9866	1.0392
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Jurisidiction: Newfoundland & Labrador

Vehicle Type: Taxi

Project ID: NL-2016Q4-TX

Exh D-4a

Summary - Premium Trend Factors

as at: 31-Dec-2015

jurisdiction (short form): NL major rating class: PUB minor rating class: TX

rating type: all

Exh D-4a Page 1 of 1

Average written date in effective period **01-Apr-2018**

Premium Trend Factors to 01-Apr-2018

Year		Bodily Injury	Property Damage	DCPD	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils	TPL (indivisible)	All Perils
		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
2006		1.0122	4.0422	4.0000	4.0000	1 0000	4 0000	2 4 4 5 5	2.0007	2.0007	1.0122	2 4 455
2006		1.0123	1.0123	1.0000	1.0000	1.0000	1.0000	2.1455	2.0607	2.0607	1.0123	2.1455
2007		1.0113	1.0113	1.0000	1.0000	1.0000	1.0000	2.0159	1.9426	1.9426	1.0113	2.0159
2008		1.0103	1.0103	1.0000	1.0000	1.0000	1.0000	1.8941	1.8312	1.8312	1.0103	1.8941
2009		1.0093	1.0093	1.0000	1.0000	1.0000	1.0000	1.7800	1.7266	1.7266	1.0093	1.7800
2010		1.0083	1.0083	1.0000	1.0000	1.0000	1.0000	1.6722	1.6273	1.6273	1.0083	1.6722
2011		1.0073	1.0073	1.0000	1.0000	1.0000	1.0000	1.5711	1.5341	1.5341	1.0073	1.5711
2012		1.0063	1.0063	1.0000	1.0000	1.0000	1.0000	1.4762	1.4461	1.4461	1.0063	1.4762
2013		1.0053	1.0053	1.0000	1.0000	1.0000	1.0000	1.3873	1.3635	1.3635	1.0053	1.3873
2014		1.0043	1.0043	1.0000	1.0000	1.0000	1.0000	1.3032	1.2851	1.2851	1.0043	1.3032
2015		1.0033	1.0033	1.0000	1.0000	1.0000	1.0000	1.2245	1.2115	1.2115	1.0033	1.2245
Annual Drift												
	Exh D-4b	0.10%	0.10%				-				0.10%	
Ded Drift	Exh D-4c			-				0.50%	(0.30%)	(0.30%)		0.50%
RG Drift	Exh D-4d			-	-			5.90%	6.40%	6.40%		5.90%
Total Drift	=(1+Limit Drift)*(1+Ded Drift)*(1+RG Drift)-1	0.10%	0.10%	-	-	-	-	6.43%	6.08%	6.08%	0.10%	6.43%

Exh D-4b
Limit Drift

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

0.1% selected geometric average change, last 4 years

Exh D-4b Page 1 of 1

Facility Association Written Exposures Distribution by Limit (in \$ms) Current 2015 2011 2012 2014 2011 Limit (in \$ms) 2013 2015 2012 2013 2014 Differential [1] [2] [3] [4] [5] [6] [7] [9] [10] [11] [8] =[2] as % =[3] as % =[4] as % =[5] as % =[6] as % rate manual FA AIX FA AIX FA AIX FA AIX total for [2] total for [3] total for [4] total for [5] total for [6] Third Party Liability (TPL) 1.000 44 42 33 25 18 100.0% 100.0% 100.0% 100.0% 100.0% 1.042 \$0.5 1.110 29 20 28 33 35 100.0% 100.0% 100.0% 100.0% 100.0% \$1.0 1.220 722 750 794 709 717 100.0% 100.0% 100.0% 100.0% 100.0% \$2.0 1.386 8 6 8 14 12 100.0% 100.0% 100.0% 100.0% 100.0% over \$2.0 up to \$5.0 1.519 other 1.703 Total 803 819 863 780 782 100.0% 100.0% 100.0% 100.0% 100.0% 0.950 0.971 0.974 Weighted Average Differential: 1.206 1.207 1.210 1.211 1.212 Annual Change: 0.1% 0.2% 0.1% 0.1% geometric average change, last 4 years 0.1% geometric average change, last 3 years 0.1%

Selected annual Drift

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

Exh D-4c Page 1 of 1

Deductible Drift

							Facility A	ssociation				
				Wr	itten Exposure	S	- demey / e		Distril	bution by Dedi	ıcitble	
	Deducitble	Current Differential	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015
		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
		rate manual	FA AIX	FA AIX	FA AIX	FA AIX	FA AIX	=[2] as % total for [2]	=[3] as % total for [3]	=[4] as % total for [4]	=[5] as % total for [5]	=[6] as % total for [6]
Collision												
	\$0	1.149	-	-	-	-	-	-	-	-	-	-
	\$100	1.149	-	-	-	-	-	-	-	-	-	-
	\$250	1.149	2	(1)	-	1	(1)	4.4%	(1.2%)	-	1.7%	(1.2%
	\$300	1.000	-	-	-	-		-	-	-	-	-
	\$500	1.000	21	35	27	32	44	53.5%	68.9%	57.5%	58.9%	63.1%
	\$1,000 over \$1,000	0.828 0.747	3 14	4 12	11 9	14 7	20 7	8.1% 34.0%	8.6% 23.7%	23.1% 19.5%	26.0% 13.4%	27.9% 10.2%
	Total	0.747	40	51	46	55	70	100.0%	100.0%	100.0%	100.0%	100.0%
		rage Deducitble	869	782	810	760	745	100.070	100.070	100.070	100.070	100.07
	Weighted Avera	ige Differential: Annual Change:	0.907	0.924 1.9%	0.911	0.924 1.4%	0.924					
					verage change,		0.5%					
					verage change,		-					
					Selected	annual Drift	0.5% s	elected geometr	ic average cha	nge, last 4 yea	rs	
Comprehe												
	\$0	1.086	-	-	-	-	-	-	-	-	-	-
	\$100	1.086	10	9	14	9	4	14.8%	9.7%	13.0%	7.4%	3.19
	\$250	1.086	27	37	46	45	15	38.1%	41.2%	41.4%	37.4%	12.5%
	\$300	1.000	-	-	-	-	-	-	-	-	-	-
	\$500	1.000	13	28	36	55	90	18.6%	31.4%	32.3%	45.7%	74.7%
	\$1,000	0.926 0.889	2 18	3 13	4 11	3 8	4 8	2.6% 25.9%	3.7%	3.8%	2.7% 6.7%	3.3%
	over \$1,000 Total	0.889	70	91	110	120	121	100.0%	14.1%	9.5%	100.0%	6.5% 100.0%
		rage Deducitble	617	517	459	457	538	100.0%	100.0%	100.0%	100.0%	100.076
	Weighted Avera	ge Differential:	1.015	1.025	1.033	1.029	1.004					
		Annual Change:		1.0%	0.8%	(0.4%)	(2.4%)					
				geometric a	verage change,	, last 4 years	(0.3%)					
				geometric a	verage change,	, last 3 years	(0.7%)					
					Selected	annual Drift	(0.3 %) s	elected geometr	ic average cha	nge, last 4 yea	rs	
Specified	Perils											
	\$0	1.086	0	-	-	-	-	0.1%	-	-	-	-
	\$100	1.086	18	15	8	10	3	7.6%	6.4%	3.7%	4.5%	1.3%
	\$250	1.086	147	148	154	161	126	62.3%	64.8%	67.9%	72.5%	57.9%
	\$300	1.000	-	-	- 34	-	- 70	- F 20/	44.304	- 1F 10/	14.10/	- 22.50
	\$500 \$1,000	1.000 0.926	13 (0)	25	34 2	31 2	73 1	5.3%	11.2%	15.1% 0.7%	14.1% 0.8%	33.5% 0.6%
	over \$1,000	0.889	(0) 58	40	28	18	15	- 24.7%	- 17.6%	12.5%	8.1%	6.7%
	Total	0.865	236	228	226	222	217	100.0%	100.0%	100.0%	100.0%	100.0%
		rage Deducitble	560	489	444	386	420	100.070	100.070	100.070	100.070	100.07
	Weighted Avera	ge Differential:	1.033	1.042	1.047	1.057	1.043					
	_	Annual Change:		0.9%	0.5%	1.0%	(1.3%)					
					verage change,		0.3%					
				geometric a	verage change,	, last 3 years	0.1%					

Exh D-4d

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

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Derivation of Average Rate Group Differentials

											Distribution	y Rate Group		
	Rate Group	MSRP differential	CLEAR differential	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
		[1]	[2]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
		Current Differentials	Current Differentials	Internal Data	=[3] as % total for [3]	=[4] as % total for [4]	=[5] as % total for [5]	=[6] as % total for [6]	=[7] as % total for [7]	=[8] as % total for [
lent Be	nefits													
	1								-	-	-	-	-	-
	3								-	-	-	-	-	
	4								-	=	-	-	-	
	<u>5</u>								-	-	-	-	-	
	7		-						-	-	-	-	-	
	9		-							-	-	-	-	
	10		-						-	-	-	-	-	
	11		-						-	-	-	-	-	
	12 13		=						-	-	-	-	-	
	14								-	-	-	-	-	
	15 16								-	-	-	-	-	
	17 18			-	-	-	-	-	-	-	-	-	-	
	18			-	-	-	-	-	-	-	-	-	-	
	20			-	-	-	-	-		-	-	-	-	
	21								-	-	-	-	-	
	23									-	-	-	-	
	24 25								-	-	-	-	-	
	26								-	-	-	-	-	
	27 28								-	-	-	-	-	
	29									-	-	-	-	
	30 31								-	-	-	-	-	
	32									-	-	-	-	
	33 34								-	-	-	-	-	
	35								-	-	-	-	-	
	36 37								-	-	-	-	-	
	38									-	-	-	-	
	39 40								-	-	-	-	-	
	41									-	-	-	-	
	42 43								-	-	-	-	-	
	44									-	-	-	-	
	45 46								-	-	-	-	-	
	47									-	-	-	-	
	48 49								-	-	-	-	-	
	50									=	-	=	=	
	total		ge Rate Group	-	-	-	-	-		-	-	-	-	

weighted average differential annual change

geometric average change, last 4 years

geometric average change, last 3 years selected annual drift:

selected as geometric average change, last 4 years

Exh D-4d

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

Exh D-4d Page 2 of 4

Derivation of Average Rate Group Differentials

											Distribution l	y Rate Group		
	Rate Group	MSRP differential	CLEAR differential	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
		[1]	[2]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
		Current Differentials	Current Differentials	Internal Data	=[3] as % total for [3]	=[4] as % total for [4]	=[5] as % total for [5]	=[6] as % total for [6]	=[7] as % total for [7]	=[8] as % total for [8]				
Collision														
	1	0.300	0.300						-	-	-	-	-	-
	2	0.395	0.395						-	-	-	-	-	-
	3 4	0.495	0.495						-	-		-		
	5	0.695	0.695						_		_	_	_	
	6	0.795	0.795						-	-	-		-	-
	7	0.895	0.895						-	=	-	-	-	-
	8	0.995	0.995						-	-	-	-	-	-
	9	1.095	1.095							-	-	-	-	-
	10	1.195	1.195						-	-	-	-	-	-
	11 12	1.295 1.395	1.295 1.395						-	-	-	-	-	-
	13	1.495	1.495							-		-	-	-
	14	1.595	1.595						-	-	-	-	-	-
	15	1.695	1.695							-	-	_		
	16	1.795	1.795						-	-	-	-	-	-
	17	1.895	1.895						-	=	-	-	-	-
	18	1.995	1.995							-	-	-	-	-
	19	2.095	2.095						-	-	-	-	-	-
	20 21	2.195 2.295	2.195 2.295						-	-	-	-	-	-
	22	2.395	2.395											
	23	2.495	2.495						_	-				
	24	2.595	2.595						-	=	-	-	-	-
	25	2.695	2.695						-	=	-	-	-	-
	26	2.795	2.795						-	-	-	-	-	-
	27	2.895	2.895							-	-	-	-	-
	28	2.995 3.145	2.995 3.145						-	-	-	-	-	-
	29 30	3.145	3.145						-	-	-	-	-	-
	31	3.545	3.545							-	-		-	-
	32	3.745	3.745						-	=	-	-	-	-
	33	3.945	3.945							-	-	-	-	-
	34	4.145	4.145						-	-	-	-	-	-
	35	4.345	4.345						=	-	-	-	-	-
	36	4.545	4.545						-	-	-	-	-	-
	37 38	4.745 4.945	4.745 4.945						-	-	-	-	-	-
	39	5.145	5.145							-	-	-	-	-
	40	5.345	5.345							-	-	-	-	-
	41	5.545	5.545						-	-	-	-	-	-
	42	5.745	5.745							-	-	-	-	-
	43	5.945	5.945						-	-	-	-	-	-
	44	6.145	6.145						-	-	-	-	-	-
	45	6.345	6.345						-	-	-	-	-	-
	46 47	6.545 6.745	6.545 6.745						-	-	-	-	-	-
	47	6.745	6.945						-	-	-	-	-	-
	49	7.145	7.145							-		-	-	-
	50	7.345	7.345						-	-	-	-	-	-
	51	7.545	7.545						-	=	-	-	-	-
	total				-	-	-			-	-	-	-	-

weighted average differential annual change

geometric average change, last 4 years geometric average change, last 3 years selected annual drift:

5.9% assume the RG drift is the same as PPV RG drift

Facility Association Residual Market (FARM) Jurisidiction: Newfoundland & Labrador Vehicle Type: Taxio

Project ID: NL-2016Q4-TX

Exh D-4d

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

Exh D-4d Page 3 of 4

Derivation of Average Rate Group Differentials

currential currential currential [1] [2] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] Current Current Internal Data Internal Data Internal Data Internal Data Internal Data Current Differentials Differentials Differentials Data Internal Data Internal Data Internal Data Internal Data Current Current Data Internal Data Internal Data Internal Data Current Current Data Current Da												Distribution b	y Rate Group		
Table Tabl		Rate Group			2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
Defence Defe					[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
2 0.395 0.395 0.395					Internal Data	Internal Dat	a Internal Data	Internal Data	Internal Data						=[8] as % total for [8]
1 0.300 0.300 1.30	Comprehe	nsive													
3 0.495 0.495	•	1	0.300	0.300						-	-	-	-	-	-
4 0.595 0.595 0.595 6 0.795 6 0.795 6 0.795 6 0.795 7 0.895 8 0.795 7 0.895 8 0.995 9										-	-	-	-	-	-
\$ 0.695 0.695 0.695											-	-	-	-	-
6 0.795 0.795 0.795										-	-	-	-	-	-
7 0.895 0.895 0.895										-	-	-	-	-	-
9 1.095 1.095										-	-	-	-	-	-
10 1.195 1.195										-	-	-	-	-	-
11 1 1295											-	-	-	-	-
12 1395 1.395 13 1.495 1.995 14 1.595 1.995 15 1.695 - 16 1.795 1.795 17 1.895 1.995 18 1.995 1.995 20 2.095 - 20 2.195 - 21 2.295 2.295 22 2.395 - 23 2.495 2.495 24 2.595 - 25 2.695 - 26 2.795 - 27 2.895 - 28 2.995 - 28 2.995 - 28 2.995 - 28 2.995 - 28 2.995 - 28 2.995 - 28 2.995 - 29 3.145 3.145 30 3.245 3.345 31 3.745 3.345 33 3.745 4.245 34 4.245 4.45 39 5.145 4.45 40 5.345 - 41 5.545										-	-	-	-	-	-
13 1.495 1.695 14 1.595 1.595 15 1.695 1.695 16 1.795 - 17 1.895 1.895 18 1.995 1.995 19 2.095 2.095 20 2.195 2.195 21 2.295 2.295 22 2.2395 - 23 2.495 2.495 24 2.595 2.595 25 2.695 - 26 2.795 - 27 2.895 - 28 2.995 - 29 3.145 3.145 30 3.345 3.345 31 3.545 3.345 33 3.945 - 33 3.945 - 34 4.145 4.145 35 4.345 - 36 4.545 4.345 37 4.745 - 38 4.945 - 40 5.345 - 41 5.545 - 44 6.145 6.145 45 6.345 6.345 49										-	-	-	-	-	-
14 1.595 1.595 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td>-</td><td></td><td>-</td></t<>											-		-		-
16 1.795 1.795 17 1.895 1.895 18 1.995 1.995 19 2.095 2.095 20 2.195 2.195 21 2.295 2.295 22 2.395 2.395 23 2.495 2.495 24 2.595 2.595 25										-		-	-	-	-
17 1.895 1.895 - - 18 1.995 1.995 - - 20 2.195 2.195 - - 21 2.295 2.295 - - 22 2.395 2.295 - - 24 2.595 2.695 - - 25 2.695 2.695 - - 26 2.795 2.795 - - 27 2.895 2.895 - - 28 2.995 2.995 - - 29 3.145 3.145 - - 30 3.345 3.345 - - 31 3.545 3.745 - - 32 3.745 3.745 - - 33 3.945 3.345 - - 34 4.145 4.145 - - 34 4.145 4.145 - - 34 4.945 - - - 38 4.945 4.945 - - 39 5.145 5.145 - - 41 5.545 5.545 <td< td=""><td></td><td></td><td>1.695</td><td>1.695</td><td></td><td></td><td></td><td></td><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></td<>			1.695	1.695						-	-	-	-	-	-
18 1.995 1.995 19 2.095 - 20 2.195 - 21 2.295 - 22 2.395 2.395 23 2.495 2.495 24 2.595 - 25 2.695 - 26 2.795 2.895 27 2.895 2.895 28 2.995 - 29 3.145 3.145 30 3.345 3.345 31 3.545 3.545 32 3.745 3.945 33 3.945 3.945 34 4.145 4.145 35 4.345 - 36 4.545 - 37 4.745 - 38 4.945 - 39 5.145 5.345 40 5.345 - 41 5.545 5.945 42 5.745 - 43 5.945 - 44 6.145 6.345 45 6.345 6.545 47 6.745 6.745 48 6.945 6.545 49										=	=	-	-	-	-
19 2.095 2.095 20 2.195 2.195 21 2.295 2.295 22 2.395 2.395 23 2.495 2.495 24 2.595 2.595 25 2.695 2.595 26 2.795 2.795 27 2.895 2.295 28 2.995 2.995 29 3.145 3.145 30 3.345 3.345 31 3.545 3.545 31 3.545 3.545 32 3,745 3.745 33 3.945 3.945 34 4.145 4.145 35 4.345 4.345 36 4.345 4.345 37 4.745 4.745 38 4.945 4.945 39 5.145 5.145 40 5.345 5.345 41 5.545 5.545 42 5.745 5.745 43 5.945 6.945 44 6.145 6.145 45 6.345 6.345 46 6.545 6.545 47 6.745 6.345 48 6.945 6.945 49 7.145 7.145 50 7.345 7.345										-	-	-	-	-	-
20 2.195 2.195 2.295													-		-
21 2.295 2.295 22 2.395 2.395 24 2.595 2.595 24 2.595 2.595 25 2.695										_	-	-			
23										-	-	-	-	-	-
24 2.595 2.595 25 2.695 2.695 26 2.795 2.795 27 2.895 2.895 28 2.995 - 29 3.145 3.145 30 3.345 - 31 3.545 3.545 32 3.745 3.745 33 3.945 - 34 4.145 4.145 35 4.345 - 36 4.545 4.545 37 4.745 - 38 4.945 4.945 39 5.145 5.145 40 5.345 - 41 5.545 - 42 5.745 - 43 5.045 5.745 44 6.145 6.145 45 6.345 6.545 47 6.745 - 48 6.945 6.945 49 7.145 - total		22								-	-	-	-	-	-
25										-	-	-	-	-	-
26 2.795 2.795 -											-	-	-	-	-
27 2.895 2.895 -										-	-	-	-	-	-
28 2.995 2.995 29 3.145 3.145 30 3.345 3.345 31 3.545 3.545 32 3.745 3.745 33 3.945 3.945 34 4.145 4.145 35 4.345 4.345 36 4.545 4.545 37 4.745 - 38 4.945 4.945 39 5.145 5.145 40 5.345 - 41 5.545 5.545 42 5.745 5.745 43 5.945 - 44 6.145 6.145 45 6.345 6.345 46 6.545 6.345 47 6.745 6.745 49 7.145 7.145 50 7.345 7.345 51 7.545 7.545										-		-	-	-	-
29 3.145 3.145 -											-	-	-	-	-
31										-	-	-	-	-	-
32											-	-	-	-	-
33 3.945 3.945 3.945										-	-		-	-	-
34										-	-	-	-		-
35													-		
36										_	-	_	_	_	_
38 4.945 4.945 -										-		-	-	-	-
39 5.145 5.145 - - - - - - - - -			4.745	4.745						-	-	-	-	-	-
40 5.345 5.345										-	-	-	-	-	-
41 5.545 5.545											-	-	-	-	-
42 5.745 5.745 43 5.945 5.945 44 6.145 6.145 45 6.345 6.345 46 6.545 6.545 47 6.745 6.745 48 6.945 6.945 49 7.145 7.145 50 7.345 7.345 51 7.545 7.545										-	-		-		-
43 5.945 5.945										_	-	-			-
44 6.145 6.145 45 6.345 6.345 46 6.545 6.545 47 6.745 6.745 48 6.945 6.945 49 7.145 7.145 50 7.345 7.345 51 7.545 7.545 total											-	-	-	-	-
46 6.545 6.545										-	=	-	-	-	-
47 6.745 6.745 48 6.945 6.945 49 7.145 7.145 50 7.345 7.345 51 7.545 7.545 total		45	6.345	6.345							-	-	-	-	-
48 6.945 6.945 49 7.145 7.145 50 7.345 7.345 51 7.545 7.545 total										-	-	-	-	-	-
49 7.145 7.145 50 7.345 7.345										-	-	-	-	-	-
50 7.345 7.345										-	-	-	-		-
51											-	-	-	-	-
total										-	-	-	-	-	-
			, , , , , , ,			-	-	-	_		-	-	-	-	
			Avera	ge Rate Group	-	-	-	-	-						

weighted average differential annual change

geometric average change, last 4 years geometric average change, last 3 years selected annual drift:

6.4% assume the RG drift is the same as PPV RG drift

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

Exh D-4d Page 4 of 4

Exh D-4d **Derivation of Average Rate Group Differentials**

_											Distribution I	by Rate Group		
-	Rate Group	MSRP differential	CLEAR differential	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
		[1]	[2]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
		Current Differentials	Current Differentials	Internal Data	=[3] as % total for [3]	=[4] as % total for [4]	=[5] as % total for [5]	=[6] as % total for [6]	=[7] as % total for [7]	=[8] as %				
pecified Pe	rils													
	1	0.300	0.300						-			-	-	-
	2	0.395	0.395						-	-	-	-	-	-
_	3	0.495	0.495							-	-	-	-	-
	4	0.595	0.595						-	-	-	-	-	-
	5	0.695	0.695						-	-	-	-	-	-
-	6 7	0.795	0.795							-	-	-	-	
	8	0.995	0.895						-			-	-	
	9	1.095	1.095						-	-	-	-	-	
-	10	1.195	1.195						-			-	-	-
	11	1.295	1.295						-	-	-	-	-	
	12	1.395	1.395						-	-	-	-	-	
	13	1.495	1.495						-	-	-	-	-	
	14	1.595	1.595						-	-	-	-	-	
-	15	1.695	1.695							-	-	-	-	
	16	1.795	1.795						-	-	-	-	-	
	17	1.895 1.995	1.895 1.995						-	-	-	-	-	
-	18 19	2.095	2.095											
	20	2.195	2.195						-	-	-	-	-	
	21	2.295	2.295						_			-		
-	22	2.395	2.395						-	-	-	-	-	
	23	2.495	2.495						-	-	-	-	-	
	24	2.595	2.595							-	-	-	-	
	25	2.695	2.695						-	-	-	-	-	
	26	2.795	2.795						-	-	-	-	-	
-	27	2.895	2.895							-	-	-	-	
	28 29	2.995 3.145	2.995 3.145						-	-	-	-	-	
	30	3.345	3.345									-	_	
-	31	3.545	3.545							-	-	-	-	
	32	3.745	3.745						-	=	-	-	-	
	33	3.945	3.945							-	-	-	-	
	34	4.145	4.145						-	-	-	-	-	
	35	4.345	4.345						-	-	-	-	-	
	36	4.545	4.545							-	-	-	-	
	37	4.745	4.745						-	-	-	-	-	
	38 39	4.945	4.945						-	-	-	-	-	
-	40	5.145 5.345	5.145								-	-	-	
	41	5.545	5.545						_	-	-	-	-	
	42	5.745	5.745						_	_	-	_	_	
-	43	5.945	5.945						-	-	-	-	-	
	44	6.145	6.145						-	-	-	-	-	
	45	6.345	6.345						-	-	-	-	-	
	46	6.545	6.545						-	-	-	-	-	
	47	6.745	6.745						-	-	-	-	-	
-	48	6.945	6.945						-	-	-	-	-	
	49 50	7.145 7.345	7.145 7.345						-	-	=	-	-	
	50 51	7.545	7.345 7.545						-	-	-	-	-	
-	total	7.343	7.545		-	-	-				-	-	-	

weighted average differential annual change

geometric average change, last 4 years geometric average change, last 3 years selected annual drift:

6.4% used comphrensive

type: FA Selected market: INDUSTRY rating class: CV as at: 31-Dec-15 jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all Exh D-5a Page 1 of 1

Exh D-5a

Summary - Loss Cost Projection Factors

		Property		As per Exh D-5l AccBen	Uninsured	Underinsured			Specified	TPL	Medical	Disability		Funeral			
Accident Year	Bodily Injury	Damage	DCPD	(indivisible)	Automobile	Motorist	Collision	Comp	Perils	(indivisible)	Expenses	Income	Death Benefits	Expenses	Supp. AccBen	All Perils	Total
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]
	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b,	Exh D-5b
	column [35]	column [36]	column [37]	column [38]	column [39]	column [40]	column [41]	column [42]	column [43]	column [44]	column [45]	column [46]	column [47]	column [48]	column [49]	column [50]	column [5
2006	1.5202	1.2830	1.2830	1.8521	2.6053	1.0000	1.0000	1.0000	1.0000	1.4590	-	-	-	-	-	1.0000	1.47
2007	1.4690	1.2572	1.2572	1.8521	2.4055	1.0000	1.0000	1.0000	1.0000	1.4150	-	-	-	-	-	1.0000	1.44
2008	1.4197	1.2319	1.2319	1.8521	2.2284	1.0000	1.0000	1.0000	1.0000	1.3722	-	-	-	-	-	1.0000	1.40
2009	1.3720	1.2070	1.2070	1.8521	2.0610	1.0000	1.0000	1.0000	1.0000	1.3307	-	-	-	-	-	1.0000	1.36
2010	1.3259	1.1826	1.1826	1.8521	1.9046	1.0000	1.0000	1.0000	1.0000	1.2904	-	-	-	-	-	1.0000	1.32
2011	1.2813	1.1589	1.1589	1.2988	1.7631	1.0000	1.0000	1.0000	1.0000	1.2513	-	-	-	-	-	1.0000	1.27
2012	1.2382	1.1356	1.1356	1.0000	1.6289	1.0000	1.0000	1.0000	1.0000	1.2134	-	-	-	-	-	1.0000	1.22
2013	1.1966	1.1127	1.1127	1.0000	1.5060	1.0000	1.0000	1.0000	1.0000	1.1765	-	-	-	-	-	1.0000	1.18
2014	1.1564	1.0904	1.0904	1.0000	1.3937	1.0000	1.0000	1.0000	1.0000	1.1407	-	-	-	-	-	1.0000	1.13
2015	1.1175	1.0683	1.0683	1.0000	1.2893	1.0000	1.0000	1.0000	1.0000	1.1060	-	-	-	-	-	1.0000	1.09
Modeled Loss (As per Exh D-5l)												
(1s)	unless otherwis		1	AccDon	Uninsured	Hadariaaur			Consisted	TPL	Medical	Disabilit		Funoral			
Accident Year	Bodily Injury	Property Damage	DCPD	AccBen (indivisible)	Automobile	Underinsured Motorist	Collision	Comp	Specified Perils	(indivisible)	Expenses	Disability Income	Death Benefits	Funeral Expenses	Supp. AccBen	All Perils	Total
	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	[32]	[33]	[34]
	,		,	LC Model		,	. ,		,		,				. ,	(,	average usi
	LC Model	LC Model	LC Model	Output +	LC Model	LC Model	LC Model	LC Model	LC Model	=sum([18] to	LC Model	LC Model	LC Model	LC Model	LC Model	=2/3*[24] +	FARM
	Output	Output	Output	sum([28] to [32])	Output	Output	Output	Output	Output	[20])	Output	Output	Output	Output	Output	1/3*[25])	exposure
2006	457.81	159.13	-	15.28	3.37	0.68	258.13	179.72	64.58	616.94	-		-		-	231.99	677.
2007	473.74	162.40		15.28	3.65	0.68	258.13	179.72	64.58	636.14					_	231.99	695.
2008	490.20	165.74	-	15.28	3.94	0.68	258.13	179.72	64.58	655.94	_	-	-	-	_	231.99	711.
2009	507.26	169.15	-	15.28	4.26	0.68	258.13	179.72	64.58	676.41	_	-	-	-	_	231.99	732.
2010	524.89	172.64	_	15.28	4.61	0.68	258.13	179.72	64.58	697.53	_	_	_	_	_	231.99	757.
2011	543.15	176.17		21.79	4.98	0.68	258.13	179.72	64.58	719.32					_	231.99	788.
2012	562.04	179.79		28.30	5.39	0.68	258.13	179.72	64.58	741.83					_	231.99	820.
2013	581.59	183.49	_	28.30	5.83	0.68	258.13	179.72	64.58	765.08	_	_	_	_	_	231.99	849.
2013	601.81	187.25		28.30	6.30	0.68	258.13	179.72	64.58	789.06	_				_	231.99	880.
2014	622.75	191.12	-	28.30	6.81	0.68	258.13	179.72	64.58	813.87	_	_	_	_	-	231.99	914.
2015	644.40	195.03	-	28.30	7.37	0.68	258.13	179.72	64.58	839.43	-	_	-	-	-	231.99	940.
2017	666.82	199.05	-	28.30	7.57	0.68	258.13	179.72	64.58	865.87	_	_	_	-	-	231.99	967.
2017	690.01	203.14		28.30	8.61	0.68	258.13	179.72	64.58	893.15	-	-	-	-	-	231.99	995.
2018	714.01	207.32	-	28.30	9.31	0.68	258.13	179.72	64.58	921.33	-	_	-	-	-	231.99	1,024.
2019	738.84	211.58	-	28.30	10.07	0.68	258.13	179.72	64.58	950.42	-	-	-		-	231.99	1,054.
@ projected av prior analysis	g accident date:			As per Exh D-5l)												
30-Sep-2017	672.55	200.06	-	28.30	8.13	0.68	258.13	179.72	64.58	872.61	-	-	-	-	-	231.99	974.
	weights by AY:	2017	75.3%	2018	24.7%												
current analysi	is																

2018

75.3%

2019

24.7%

weights by AY:

Facility Association Residual Market (FARM) Jurisidiction: Newfoundland & Labrador Vehicle Type: Taxi

Project ID: NL-2016Q4-TX

Exh D-5b

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all Exh D-5b Page 1 of 2

Summary - Loss Cost Projection Factors (BASED ON FA SELECTED MODELS)

	re (excl trailers) unless otherwis	se indicated	FARM	as at:	31-Dec-2015						Trend Ma	jor Rating Clas	s: CV	Trend Mi	nor Rating Class:	CV	
Accident Year	Bodily Injury	Property Damage	DCPD	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils	TPL (indivisible)	Medical Expenses	Disability Income	Death Benefits	Funeral Expenses	Supp. AccBen	All Perils	Total
	[1] FARM AIX data	[2] FARM AIX data	[3] FARM AIX data	[4] FARM AIX data	[5] FARM AIX data	[6] FARM AIX data	[7] FARM AIX data	[8] FARM AIX data	[9] FARM AIX data	[10] FARM AIX data	[11] FARM AIX data	[12] FARM AIX data	[13] FARM AIX data	[14] FARM AIX data	[15] FARM AIX data	[16] FARM AIX data	[17] =max([1] to [3])+[10]
2006	-	-	-	414	570	-	27	51	164	573	-	-	-	-	-	-	573
2007	-	-	-	457	662	-	24	49	224	663	-	-	-	-	=	1	663
2008	-	-	-	519	719	-	27	46	219	725	-	-	-	-	-	1	725
2009 2010	-	-	-	553 582	758 776	-	21 28	52 62	254 249	764 780	-	-	-	-	-	1	764 780
2010	-	-	-	611	776	-	28 36	67	249	780	-	-	-	-	-	2	780
2012	_	_	-	639	816	-	46	79	235	816	_	_	-		-	2	816
2013	=	-	-	693	854	=	49	100	231	852	-	=	-	-	=	8	852
2014	-	-	-	682	826	-	51	115	220	820	-	-	-	-	-	12	820
2015	-	-	-	675	804	-	64	127	227	795	-	-	-	-	-	6	795
2016	-	-	-	675	804	-	64	127	227	795	-	-	-	-	-	6	795
2017	-	-	-	675	804	-	64	127	227	795	-	-	-	-	-	6	795
2018 2019	-	-	-	675 675	804 804	-	64 64	127 127	227 227	795 795	-	-	-	-	-	6	795 795
2019	-	-	-	675	804	-	64	127	227	795	_	-	-	-	-	6	795
Modeled Loss	Cost unless otherwis	se indicated	INDUSTRY	as at:	31-Dec-2015												
Accident Year	Bodily Injury	Property Damage	DCPD	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils	TPL (indivisible)	Medical Expenses	Disability Income	Death Benefits	Funeral Expenses	Supp. AccBen	All Perils	Total
	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	[32]	[33]	[34]
				LC Model													average using
	LC Model	LC Model	LC Model	Output +	LC Model	LC Model	LC Model	LC Model	LC Model	=sum([18] to	LC Model	=2/3*[24] +	FARM				
	Output	Output	Output	sum([28] to [32])	Output	Output	Output	Output	Output	[20])	Output	Output	Output	Output	Output	1/3*[25])	exposures
2006	457.81	159.13	-	15.28	3.37	0.68	258.13	179.72	64.58	616.94	-	-	-	-	-	231.99	677.98
2007	473.74	162.40	-	15.28	3.65	0.68	258.13	179.72	64.58	636.14	-	-	-	-	=	231.99	695.11
2008	490.20	165.74	-	15.28	3.94	0.68	258.13	179.72	64.58 64.58	655.94	-	-	-	-	-	231.99	711.63 732.80
2009 2010	507.26 524.89	169.15 172.64	-	15.28 15.28	4.26 4.61	0.68 0.68	258.13 258.13	179.72 179.72	64.58	676.41 697.53	-	-	-	-	-	231.99 231.99	757.98
2010	543.15	172.04	-	21.79	4.61	0.68	258.13	179.72	64.58	719.32	_	-	-	-	-	231.99	788.20
2012	562.04	179.79	-	28.30	5.39	0.68	258.13	179.72	64.58	741.83	_	_	-	-	-	231.99	820.50
2013	581.59	183.49	-	28.30	5.83	0.68	258.13	179.72	64.58	765.08	-	-	-	-	=	231.99	849.57
2014	601.81	187.25	-	28.30	6.30	0.68	258.13	179.72	64.58	789.06	-	-	-	-	=	231.99	880.92
2015	622.75	191.12	-	28.30	6.81	0.68	258.13	179.72	64.58	813.87	-	-	-	-	-	231.99	914.47
2016	644.40	195.03	-	28.30	7.37	0.68	258.13	179.72	64.58	839.43	-	=	=	-	=	231.99	940.59
2017	666.82	199.05	-	28.30	7.97	0.68	258.13	179.72	64.58	865.87	-	-	-	-	-	231.99	967.64
2018 2019	690.01 714.01	203.14 207.32	-	28.30 28.30	8.61 9.31	0.68 0.68	258.13 258.13	179.72 179.72	64.58 64.58	893.15 921.33	-	-	-	-	-	231.99 231.99	995.57 1,024.45
2019	714.01	207.32	-	28.30	10.07	0.68	258.13	179.72	64.58	921.33		-	-	-	-	231.99	1,024.45
	g accident date:			20.30	10.07	0.00	230.13	173.72	04.30	330.42						231.33	1,054.51
30-Sep-2017	672.55	200.06	-	28.30	8.13	0.68	258.13	179.72	64.58	872.61	-	-	-	-	-	231.99	974.54
	weights by AY:	2017	75.3%	2018	24.7%												
current analysi	s																
30-Sep-2018	695.94	204.17	-	28.30	8.78	0.68	258.13	179.72	64.58	900.11	-	=	-	-	-	231.99	1,002.70
	weights by AY:	2018	75.3%	2019	24.7%												

Project ID: NL-2016Q4-TX

Exh D-5b

Vehicle Type: Taxi

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

Exh D-5b Page 2 of 2

Summary - Loss Cost Projection Factors (BASED ON FA SELECTED MODELS)

Loss Cost Projection Factors to 30-Sep-2018

Accident Year	Bodily Injury	Property Damage	DCPD	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils
	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]
	=[18], [@ proj date]/AY	=[19], [@ proj date]/AY	=[20], [@ proj date]/AY	=[21], [@ proj date]/AY	=[22], [@ proj date]/AY	=[23], [@ proj date]/AY	=[24], [@ proj date]/AY	=[25], [@ proj date]/AY	=[26], [@ proj date]/AY
2006	1.5202	1.2830	1.2830	1.8521	2.6053	1.0000	1.0000	1.0000	1.0000
2007	1.4690	1.2572	1.2572	1.8521	2.4055	1.0000	1.0000	1.0000	1.0000
2008	1.4197	1.2319	1.2319	1.8521	2.2284	1.0000	1.0000	1.0000	1.0000
2009	1.3720	1.2070	1.2070	1.8521	2.0610	1.0000	1.0000	1.0000	1.0000
2010	1.3259	1.1826	1.1826	1.8521	1.9046	1.0000	1.0000	1.0000	1.0000
2011	1.2813	1.1589	1.1589	1.2988	1.7631	1.0000	1.0000	1.0000	1.0000
2012	1.2382	1.1356	1.1356	1.0000	1.6289	1.0000	1.0000	1.0000	1.0000
2013	1.1966	1.1127	1.1127	1.0000	1.5060	1.0000	1.0000	1.0000	1.0000
2014	1.1564	1.0904	1.0904	1.0000	1.3937	1.0000	1.0000	1.0000	1.0000
2015	1.1175	1.0683	1.0683	1.0000	1.2893	1.0000	1.0000	1.0000	1.0000

TPL (indivisible)	Medical Expenses	Disability Income	Death Benefits	Funeral Expenses	Supp. AccBen	All Perils	Total
[44]	[45]	[46]	[47]	[48]	[49]	[50]	[51]
=[27], [@ proj date]/AY	=[28], [@ proj date]/AY	=[29], [@ proj date]/AY	=[30], [@ proj date]/AY	=[31], [@ proj date]/AY	=[32], [@ proj date]/AY	=[33], [@ proj date]/AY	=[34], [@ proj date]/AY
1.4590	-	-	-	-	-	1.0000	1.4790
1.4150	-	=	-	-	-	1.0000	1.4425
1.3722	-	-	-	-	-	1.0000	1.4090
1.3307	-	-	-	-	-	1.0000	1.3683
1.2904	-	-	-	-	-	1.0000	1.3229
1.2513	-	-	-	-	-	1.0000	1.2721
1.2134	-	-	-	-	-	1.0000	1.2221
1.1765	-	-	-	-	-	1.0000	1.1802
1.1407	-	-	-	-	-	1.0000	1.1382
1 1060	_	_	_	_	_	1 0000	1 0965

Vehicle Type: Taxi

Project ID: NL-2016Q4-TX

Exh E-1

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

Exh E-1 Page 1 of 2

	of Credibility Accident Year	Earned Exposure (excl	Accident Year Weight	Recorded Claim Count	FA Claim Dev. Factor	Ultimate Claim Count	Adjusted Claim Count	Full Credibility Standard	Credibility
		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
		FA AIX	Exh D-1, col [18]	FA AIX	=Exh E-2, Section C	=[3]*[4]	=0 where [2]=0, otherwise [5]	judgement	=min(100%, [6]/[7]^(1/2))
TPL (indivisible))								
TPL (indivis)	2006	573	-	103	1.0000	103	-		
	2007	663	-	131	1.0000	131	-		
	2008	725	-	118	1.0000	118	-		
	2009	764	-	133	1.0000	133	-		
	2010	780	-	128	1.0000	128	-		
	2011	793	20.0%	164	1.0000	164	164		
	2012	816	20.0%	153	0.9958	152	152		
	2013	852	20.0%	138	0.9949	137	137		
	2014	820	20.0%	173	0.9939	172	172		
	2015	795	20.0%	168	1.0758	181	181		
	Total/Wtd Avg.	7,581	100.00%	1,409		1,419	806	3,246	49.8%
AccBen (indivisi	ible)								
AccBen (indivis)	2006	414	-	34	1.0000	34	-		
	2007	457	-	22	1.0000	22	-		
	2008	519	-	41	1.0000	41	-		
	2009	553	-	37	1.0000	37	-		
	2010	582	-	26	1.0000	26	-		
	2011	611	20.0%	48	1.0000	48	48		
	2012	639	20.0%	42	1.0000	42	42		
	2013	693	20.0%	44	0.9806	43	43		
	2014	682	20.0%	45	0.9248	42	42		
	2015	675	20.0%	50	1.0191	51	51		
	Total/Wtd Avg.	5,825	100.00%	389		386	226	2,164	32.3%
Jninsured Auto									
JA	2006	570	-	7	1.0000	7	-		
	2007	662	-	5	1.0000	5	-		
	2008	719	-	3	1.0000	3	-		
	2009	758	-	8	1.0000	8	-		
	2010	776	-	5	1.0000	5	-		
	2011	793	20.0%	5	0.9981	5	5		
	2012	816	20.0%	3	0.9902	3	3		
	2013	854	20.0%	8	0.8699	7	7		
	2014	826	20.0%	8	0.9753	8	8		
	2015	804	20.0%	4	0.6964	3	3		
	Total/Wtd Avg.	7,578	100.00%	56		54	26	2,164	11.0%

FA Actuarial printed: 12/21/2016 10:55 AM

Exh E-1

Project ID: NL-2016Q4-TX

Jurisidiction: Newfoundland & Labrador Vehicle Type: Taxi

Total/Wtd Avg.

2,264

100.00%

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

Exh E-1 Page 2 of 2

Calculation of Credibilit	Assigned to Facility Association Experience	
	7 155 15 11 Car to 1 demity 7 1550 chathor Experience	

Calculat	ion of Credibility	Assigned to Fa	acility Associ	ation Experi	ience			as at:	31-Dec-2015
	Accident Year	Earned Exposure (excl trailers)	Accident Year Weight	Recorded Claim Count	FA Claim Dev. Factor	Ultimate Claim Count	Adjusted Claim Count	Full Credibility Standard	Credibility
		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
		FA AIX	Exh D-1, col [18]	FA AIX	=Exh E-2, Section C	=[3]*[4]	=0 where [2]=0, otherwise [5]	judgement	=min(100%, [6]/[7]^(1/2))
Collision									
CL	2006	27	-	1	1.0000	1	_		
	2007	24	-	2	1.0000	2	_		
	2008	27	-	3	1.0000	3	_		
	2009	21	-	1	1.0000	1	_		
	2010	28	-	2	1.0000	2	-		
	2011	36	20.0%	2	1.0000	2	2		
	2012	46	20.0%	6	1.0000	6	6		
	2013	49	20.0%	7	1.0000	7	7		
	2014	51	20.0%	7	1.0000	7	7		
	2015	64	20.0%	20	0.9774	20	20		
	Total/Wtd Avg.	373	100.00%	51		51	42	1,082	19.7%
Comp		•							
CM	2006	51	-	1	1.0000	1	-		
	2007	49	-	6	1.0000	6	-		
	2008	46	-	1	1.0000	1	-		
	2009	52	-	3	1.0000	3	-		
	2010	62	-	3	1.0000	3	-		
	2011	67	20.0%	4	1.0000	4	4		
	2012	79	20.0%	7	1.0000	7	7		
	2013	100	20.0%	8	1.0000	8	8		
	2014	115	20.0%	8	1.0000	8	8		
	2015	127	20.0%	7	0.9584	7	7		
	Total/Wtd Avg.	748	100.00%	48		48	34	1,082	17.7%
Specified P	Perils								
SP	2006	164	-	1	1.0000	1	-		
	2007	224	-	2	1.0000	2	-		
	2008	219	-	2	1.0000	2	-		
	2009	254	-	3	1.0000	3	-		
	2010	249	-	2	1.0000	2	-		
	2011	241	20.0%	1	1.0000	1	1		
	2012	235	20.0%	4	1.0000	4	4		
	2013	231	20.0%	3	1.0000	3	3		
	2014	220	20.0%	-	1.0000	-	-		
	2015	227	20.0%	1	1.0000	1	1		

19

19

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1,082

9.1%

Exh E-2 Page 1 of 1

Facility Association Residual Market (FARM) Jurisidiction: Newfoundland & Labrador Vehicle Type: Taxi Project ID: NL-2016Q4-TX Exh E-2 jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all

Claim Count Development Factors Val Market: FARM Val Jurisdiction: NL Val Business Segment: non-PPV

30-Jun-2016	A. Selected Ulti	mate Claim Cou	nt by Minor Co	verage Type												
Accident Year	Bodily Injury	Property Damage	DCPD	TPL (indivisible)	Medical Expenses	Disability Income	Death Benefits	Funeral Expenses	Supp. AccBen	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils	All Per
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]
	2016 Q2 FARM valuation	2016 Q2 FARM valuation	2016 Q2 FARM valuation	=sum([1]to[3])	2016 Q2 FARM valuation	2016 Q2 FARN valuation	1 2016 Q2 FARM 2 valuation	2016 Q2 FARN valuation	1 2016 Q2 FARM valuation	2016 Q2 FARM valuation + sum([5]to[9])	2016 Q2 FARM valuation	2016 Q2 FARM valuation	2016 Q2 FARM 2 valuation	2016 Q2 FARM valuation	2016 Q2 FARM valuation	=2/3*[: 1/3*[:
2006	49	111	-	160						44	7	-	11	17	7	
2007	75	129	-	204						40	6	-	15	15	6	
2008	63	109	-	172						56	7	-	17	10	9	
2009	70	128	-	198						52	9	-	11	17	6	
2010	66	124	-	190						44	6	1	15	9	6	
2011	75	166	-	241						68	7	-	15	28	7	
2012	88	148	-	236						59	3	-	20	21	12	
2013	71	125	-	196						61	8	-	20	27	7	
2014	73	159	-	233						55	9	-	16	20	4	
2015	72	161	_	233						70	5	_	30	19	6	

diagonal:	31-Dec-2015	B. LTD Recorde	d Claim Count b	y Minor Covera	ge Type												
	Accident Year	Bodily Injury	Property	DCPD	TPL	Medical	Disability	Death Benefits	Funeral	Supp. AccBen	AccBen	Uninsured	Underinsured	Collision	Comn	Specified Perils	All Perils
	Accident real	boully illjury	Damage	DCPD	(indivisible)	Expenses	Income	Death beliefits	Expenses	зирр. Ассвен	(indivisible)	Automobile	Motorist	Collision	Comp	specified Perils	All Perils
-		[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	[32]
											2015 Q4 FARM						
		2015 Q4 FARM	2015 Q4 FARM	2015 Q4 FARM	=sum([17]to	2015 Q4 FARM	2015 Q4 FARM	1 2015 Q4 FARM	2015 Q4 FARM	2015 Q4 FARM	Data +	2015 Q4 FARM	=2/3*[29] +				
		Data	Data	Data	[19])	Data	Data	Data	Data	Data	sum([21]to[25]	Data	Data	Data	Data	Data	1/3*[30])
)						
	2006	49	111	-	160	32	12	-	-	-	44	7	-	11	17	7	7
	2007	75	129	-	204	28	10	1	1	-	40	6	-	15	15	6	8
	2008	63	109	-	172	37	18	-	1	-	56	7	1	17	10	9	4
	2009	70	128	-	198	39	13	-	-	-	52	9	-	11	17	6	6
	2010	66	124	-	190	32	10	1	1	-	44	6	1	15	9	6	5
	2011	75	166	-	241	52	15	-	1	-	68	7	-	15	28	7	7
	2012	89	148	-	237	45	14	-	-	-	59	3	-	20	21	12	6
	2013	71	126	-	197	51	9	1	1	-	62	9	-	20	27	7	3
	2014	74	160	-	234	46	12	-	2	-	60	9	=-	16	20	4	6
-	2015	66	151	=	217	56	12	-	1	=	69	7	Ξ	31	20	6	7

	C. Implied Claim	n Count Develop	pment Factor (Co	CDF)												
Accident Year	Bodily Injury	Property	DCPD	TPL	Medical	Disability	Death Benefits	Funeral	Supp. AccBen	AccBen	Uninsured	Underinsured	Collision	Comp	Specified Perils	All Perils
71001000110 TCUI	bodiny injury	Damage	50.5	(indivisible)	Expenses	Income	Beatin Benefits	Expenses	эарр: //севен	(indivisible)	Automobile	Motorist	comsion	comp	Specifica r criis	71111 C1113
	[33]	[34]	[35]	[36]	[37]	[38]	[39]	[40]	[41]	[42]	[43]	[44]	[45]	[46]	[47]	[48]
	=if(or([5]=0,[1	=if(or([5]=0,[1	=if(or([5]=0,[1		=if(or([5]=0,[2	=if(or([5]=0,[2	=if(or([5]=0,[2	=if(or([5]=0,[2	=if(or([5]=0,[2		-:f/[27]-0 [42]	=if([28]=0,[33],				
	7]=0),[36],[1]/[8]=0),[36],[2]/[9]=0),[36],[3]/[=[4]/[20]	1]=0),[42],[5]/[2]=0),[42],[6]/[3]=0),[42],[7]/[4]=0),[42],[8]/[5]=0),[42],[9]/[=[10]/[26]		[12]/[28])	=[13]/[29]	=[14]/[30]	=[15]/[31]	=[16]/[32]
	17])	18])	19])		21])	22])	23])	24])	25])		[11]/[27])	[12]/[20])				
2006	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2007	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2008	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	-	1.0000	1.0000	1.0000	1.0000
2009	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2010	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9017	1.0000	1.0000	1.0000	1.0000
2011	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9981	1.0000	1.0000	1.0000	1.0000	1.0000
2012	0.9888	1.0000	0.9958	0.9958	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9902	0.9888	1.0000	1.0000	1.0000	1.0000
2013	1.0000	0.9921	0.9949	0.9949	0.9806	0.9806	0.9806	0.9806	0.9806	0.9806	0.8699	1.0000	1.0000	1.0000	1.0000	1.0000
2014	0.9910	0.9952	0.9939	0.9939	0.9248	0.9248	0.9248	0.9248	0.9248	0.9248	0.9753	0.9910	1.0000	1.0000	1.0000	1.0000
2015	1.0960	1.0670	1.0758	1.0758	1.0191	1.0191	1.0191	1.0191	1.0191	1.0191	0.6964	1.0960	0.9774	0.9584	1.0000	0.9929

Jurisidiction: Newfoundland & Labrador

Vehicle Type: Taxi

Project ID: NL-2016Q4-TX

jurisdiction (short form): NL

major rating class: PUB minor rating class: TX

rating type: all

Exh F-1

Interest Rate Selection for Discount and Cost of Capital Calculations Based on Canadian Treasury and Canada Bonds Yields

	ŀ	Historical Yields		
91-day	1-3 yr	3-5 yr	5-10 yr	10+ yr
[1]	[2]	[3]	[4]	[5]
4.10	4.07	4.10	4.18	4.30
4.22	4.22	4.21	4.25	4.34
2.41	2.66	2.96	3.36	4.04
0.35	1.21	2.15	2.84	3.89
0.60	1.48	2.21	2.88	3.66
0.92	1.38	1.85	2.47	3.21
0.98	1.12	1.30	1.63	2.33
0.97	1.12	1.48	1.99	2.72
0.91	1.05	1.38	1.87	2.60
0.50	0.53	0.66	1.19	2.02
2.34	2.73	3.13	3.50	4.05
0.86	1.04	1.33	1.83	2.58
1.85	1.40	0.99	0.68	0.28
0.20	0.31	0.43	0.47	0.45
	[1] 4.10 4.22 2.41 0.35 0.60 0.92 0.98 0.97 0.91 0.50 2.34 0.86	91-day 1-3 yr [1] [2] 4.10 4.07 4.22 4.22 2.41 2.66 0.35 1.21 0.60 1.48 0.92 1.38 0.98 1.12 0.97 1.12 0.91 1.05 0.50 0.53 2.34 2.73 0.86 1.04	91-day 1-3 yr 3-5 yr [1] [2] [3] 4.10 4.07 4.10 4.22 4.21 2.41 2.41 2.66 2.96 0.35 1.21 2.15 0.60 1.48 2.21 0.92 1.38 1.85 0.98 1.12 1.30 0.97 1.12 1.48 0.91 1.05 1.38 0.50 0.53 0.66 2.34 2.73 3.13 0.86 1.04 1.33 1.85 1.40 0.99	91-day 1-3 yr 3-5 yr 5-10 yr [1] [2] [3] [4] 4.10 4.07 4.10 4.18 4.22 4.22 4.21 4.25 2.41 2.66 2.96 3.36 0.35 1.21 2.15 2.84 0.60 1.48 2.21 2.88 0.92 1.38 1.85 2.47 0.98 1.12 1.30 1.63 0.97 1.12 1.48 1.99 0.91 1.05 1.38 1.87 0.50 0.53 0.66 1.19 2.34 2.73 3.13 3.50 0.86 1.04 1.33 1.83 1.85 1.40 0.99 0.68

Above from the Canadian Institute of Actuary

Report on Canadian Economic Statistics, 1924-2015, Table 4A

Current Risk Free Yield	s (basis points)					wgted avg
10/31/2016	0.50	0.56	0.62	0.94	1.68	0.62
weights:	9.0%	49.0%	29.0%	13.0%	0.0%	
avg maturity:	3.2 years	(weig	thted based on clain	ns payment patterns		
	580	3,307	1,942	907	23	6,759

BoC at 2016-10-31 http://www.bankofcanada.ca/rates/interest-rates

Selected Gross Yield: 2.95% Investment Expenses (rounded): 0.15%

Selected Net Yield: 2.80% Exh F-1

Page 1 of 1

Jurisidiction: Newfoundland & Labrador

Vehicle Type: Taxi

Project ID: NL-2016Q4-TX

Exh F-2

major rating class: PUB

minor rating class: TX rating type: all

jurisdiction (short form): NL

Exh F-2

Page 1 of 2

Present Value Factors - Claim Amounts - Facility Association

Discount Rate 2.80%

Accident Year Estimated Payment Pattern by Development Age			nt Age	Val Market:	FARM	Val Jurisdiction: NL			Val Business Segment: non-PPV					: Jun 30, 2016			
Development Age	Bodily Injury	Property Damage	DCPD	TPL (indivisible)	Medical Expenses	Disability Income	Death Benefits	Funeral Expenses	Supp. AccBen	AccBen (indivisible)	Uninsured Automobile	Underinsured Motorist	Collision	Comp	Specified Perils	All Perils	Present Value Factor
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[15]
	Emergence Model Output	Emergence Model Output	=[10]	=[1]	Emergence Model Output	Emergence Model Output	=[14]	=[13]	=(1+[dsct rate])^{-1* ([dev'l age]- 6)/12}								
12	1.5%	61.7%	100.0%	8.9%	100.0%	100.0%	100.0%	100.0%	100.0%	17.4%	17.4%	1.5%	96.8%	88.9%	88.9%	96.8%	0.9863
24	14.3%	32.7%	-	16.5%	-	-	-	-	-	34.8%	34.8%	14.3%	3.2%	11.1%	11.1%	3.2%	0.9594
36	27.9%	3.4%	-	24.9%	-	-	-	-	-	24.8%	24.8%	27.9%	-	-	-	-	0.9333
48	25.3%	0.5%	-	22.3%	-	-	-	-	-	9.0%	9.0%	25.3%	-	-	-	-	0.9079
60	12.8%	0.5%	-	11.3%	-	-	-	-	-	9.0%	9.0%	12.8%	-	-	-	-	0.8831
72	5.3%	0.5%	-	4.7%	-	-	-	-	-	2.6%	2.6%	5.3%	-	-	-	-	0.8591
84	7.7%	0.5%	-	6.8%	-	-	-	-	-	1.2%	1.2%	7.7%	-	-	-	-	0.8357
96	4.3%	0.2%	-	3.8%	-	-	-	-	-	1.2%	1.2%	4.3%	-	-	-	-	0.8129
108	0.8%	-	-	0.7%	-	-	-	-	-	-	-	0.8%	-	-	-	-	0.7908
120	0.1%	-	-	0.1%	-	-	-	-	-	-	-	0.1%	-	-	-	-	0.7692
132	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7483
144	-	-	-	=	-	-	-	-	-	-	-	-	-	-	-	-	0.7279
156	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7081
168	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6888
180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6700
192	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6518
204	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6340
216	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6168
228	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6000
240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5836
252	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5677
264	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5523
276	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5372
288	100.00/	100.00/	100.00/	100.00/	100.00/	100.00/	100.00/	100.00/	100.00/	100.00/	100.00/	100.00/	100.00/	100.00/	100.00/	100.00/	0.5226
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Jurisidiction: Newfoundland & Labrador

Vehicle Type: Taxi

Project ID: NL-2016Q4-TX

Exh F-2

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all Exh F-2 Page 2 of 2

Present Value Factors - Claim Amounts - Facility Association

Discount Rate 2.80%

Policy Year Estimated Payment Pattern by Development Age

V factor	0.8943	0.9596	0.9729	0.9024	0.9729	0.9729	0.9729	0.9729	0.9729	0.9275	0.9275	0.8943	0.9720	0.9699	0.9699	0.9720	
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
300	-	-		-		•	-	-	-		-	=		-	-	-	0.5084
288	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.522
276	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.537
264	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.552
252	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.567
240	=	-	-	-	-	-	-	-	-	-	-	-	-	-	=	-	0.583
228	=	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.600
216	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.616
204	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.634
192	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.651
180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.670
168	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.688
156	-	-	-	-	_	_	-	-	_	-	-	-	-	-	-	-	0.708
144	-	-	-	-	_	_	-	-	_	-	-	-	-	-	-	-	0.727
132	0.1%	-	-	0.1%	_	_	-	-	_	-	-	0.1%	-	-	-	-	0.748
120	0.5%	-	_	0.4%	-	-	-	_	-	=	=	0.5%	-	=	=	-	0.769
108	2.6%	0.1%	_	2.3%	_	_	-	-	_	0.6%	0.6%	2.6%	-	-	-	-	0.790
96	6.0%	0.4%	_	5.3%	_	_	-	-	_	1.2%	1.2%	6.0%	-	-	-	-	0.812
84	6.5%	0.5%	-	5.8%	-	_	_	-	_	1.9%	1.9%	6.5%	-	-	-	-	0.835
72	9.1%	0.5%	_	8.0%	_	_	-	_	_	5.8%	5.8%	9.1%	-	_	-	_	0.859
60	19.1%	0.5%	_	16.8%	_	_	_	_	_	9.0%	9.0%	19.1%	_	_	_	_	0.883
48	26.6%	2.0%	_	23.6%	_	_	_	_	_	16.9%	16.9%	26.6%	-	-	-	-	0.907
36	21.1%	18.1%	-	20.7%	-	-	-	-	-	29.8%	29.8%	21.1%	1.6%	5.6%	5.6%	1.6%	0.933
24	7.9%	47.2%	50.0%	12.7%	50.0%	50.0%	50.0%	50.0%	50.0%	26.1%	26.1%	7.9%	50.0%	50.0%	50.0%	50.0%	0.959
12	0.5%	30.7%	50.0%	4.3%	50.0%	50.0%	50.0%	50.0%	50.0%	8.7%	8.7%	0.5%	48.4%	44.4%	44.4%	48.4%	0.986
	% by age	% by age	% by age	% by age	% by age	% by age	% by age	% by age	% by age	% by age	% by age	% by age	% by age	% by age	% by age	% by age	([dev'l age]- 6)/12}
				average of AY												-	rate])^{-1*
																	=(1+[dsct
	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]	[29]	[30]	[31]	[30]
Age		Damage		(indivisible)	Expenses	Income	Benefits	Expenses		(indivisible)	Automobile	Motorist		·	Perils		Factor
Development	Bodily Injury	Property	DCPD	TPL	Medical	Disability	Death	Funeral	Supp. AccBen	AccBen		Underinsured	Collision	Comp	Specified	All Perils	Present Valu

jurisdiction (short form): NL

major rating class: PUB

minor rating class: TX

rating type: all

Exh G-1

Page 1 of 1

Facility Association Residual Market (FARM)

Jurisidiction: Newfoundland & Labrador

Vehicle Type: Taxi

Project ID: NL-2016Q4-TX

Exh G-1

Development of Present Value Factors - Premium and Expense

Assuming 2.80% Annual Rate of Return

	-	F	Percentage of Premiu	m	•	
	-	Nominal	Discount Factor	Discounted	•	
		[A]	[B]	[C]		
Da				=[A]*[B]		
Revenue [1]	Premium	100.00	0.9963	99.63	assumed collection delay, in mths: 1.6 based on the pre	mium lag analysis
[2]	Finance Fee	-	0.9963	-	n/a	
[3]	Total Revenue	100.00		99.63	=[1]+[2]	
Effective Co	mmission Ratios					
[4]	estimated @ current rates	6.00	0.9963	5.98	Exh G-2 row [3]	
[5]	at indicated target rate change	6.00	0.9963	5.98	 okay verifies commission ratio correct wit 	h Exh G-2 row [3]
[6]	at indicated rate change & alternate target	6.00	0.9963	5.98	 okay verifies commission ratio correct with 	h Exh G-2 row [3]
[7]	at proposed rates	6.00	0.9963	5.98	 okay verifies commission ratio correct with 	h Exh G-2 row [3]
Premium Va	riable Expenses, premium tax and S.C. non-claims fees					
[8]	Premium tax	5.00	0.9963	4.98	Premium and Fire Tax Rate - 2016 (per IBC legal bulletin)	
[9]	Servicing carrier operating cost	9.00	0.9963		Plan of Operation, Article IX, 2(a)	
[10]	Servicing carrier fees	1.00	0.9963		Plan of Operation, Article IX, 2(a)	
[11]	Premium finance admin expenses	-	0.9963	-	n/a	
[12]	GISA Levy (% of ALL COVERAGES premium)	0.06	0.9963	0.06	=[33]	
[13]	Rate Regulatory Levy (where it is % of ALL COVERAGES	0.13	0.9963		=[36]	
,,	premium)					
[14]	Health Levy (where it is % of ALL COVERAGES premium)		0.9963	-		
					as applicable	
[15]	Total Premium Variable Expenses, premium tax and S.C. non-	15.19		15.14	=sum of rows [8] thru [14]	
	claims fees, other than TPL					
[16]	Health Levy (where it is % of TPL ONLY)		0.9963	-	as applicable	
[17]	Total Premium Variable Expenses, premium tax and S.C. non-	15.19			=[15]+[16]	
	claims fees, TPL ONLY					
Promium Va	riable Expenses, Servicing Carrier Initial Claims Fee					
[18]	Servicing carrier claims fee reimbursement ratio	10.00	0.9725	9 73	Accounting & Statistical Manual, Chapter 7.4	avg earned mth: 12
[10]	servicing carrier claims rec remisursement ratio	10.00	0.3723	3.73	recounting a statistical manage, enapter 77	01g curicu man 12
Fixed Expen						
[19]	Bad Debt	-	0.9963	-	per FA finance	
[20]	Central Office	2.50	0.9963		Exh G-2 row [7]	
[21]	Total Fixed Expense (used directly for other than TPL)	2.50		2.49	=[19]+[20]	
[22]	TPL Written Exposures	782			Exh C-2 row [17]	
[23]	On-level TPL Written Premium (\$1s)	4,059,616			Exh C-2 row [29]	
[24]	Driver Record Abstracts	69.69			Driver Record Abstracts Analysis	
[25]	Driver Record Abstracts Cost (total in \$s)	54,480			=[22]*[24]	
[26]	Driver Record Abstracts as % of premium	1.34	0.9963	1.34	=100*[25]/[23]	
[27]	Health Levy per earned vehicle				Health Levy Analysis	
[28]	Health Levy Cost (total in \$s)	-			=[22]*[27]	
[29]	Health Levy (where it is per vehicle), as % of premium	-	0.9963	_	=100*[28]/[23]	
[30]	Total Fixed Expense (used directly for TPL ONLY)	3.84	2.2303	3.83	=[21]+[26]+[29]	
	OPA and Date Development and a					
Support for [31]	GISA and Rate Regulator Levies GISA Cost	10,463,846			Total Expense from the GISA 2014 Annual Directors Report	
[32]	Industry Annual Written Premium (\$1,000s)	17,599,280			2014 Industry AU11 AIX (Country-wide)	2014 Industry AU11 A
[33]	GISA Levy as % of premium	0.06	0.9963	0.06	=100*[31]/[32]	Written Premium (\$000
اردرا	Sist 2019 as 70 or premium	0.00	0.3303	0.00	. 100 [02][[02]	TOTAL 17,599,28
[34]	Rate Regulator Annual Industry Levy Cost (total in \$s)	507,748			2014-2015 Annual Report - NLPUB	ON 12,149,83
[35]	Industry Annual Written Premium (\$1,000s)	396,353			2014 Industry AU11 AIX (NL)	AB 3,944,47
[36]	Rate Regulator Levy as % of premium	0.13	0.9963	0.13	=100*[34]/[35]	Atlantics 1,446,229
						, -,

Facility Association Residual Market (FARM) Jurisidiction: Newfoundland & Labrador Vehicle Type: Taxi

Project ID: NL-2016Q4-TX

Exh G-2

rating type: all

jurisdiction (short form): NL major rating class: PUB minor rating class: TX

Expense A	ssumptions - Selections		j	urisdiction code: 07	5	bu	siness segment:	N			1	
			2015	2014	2013	2012	2011	Total	Last 3 complete L Years	ast 2 complete Years	Selected	
[1]	Written Premium	Participation Rpt	6,687,052	6,452,306	6,376,174	5,681,761	5,570,217	30,767,510	19,515,532	13,139,358		
[2]	Agents Commissions	Participation Rpt	491,707	479,481	483,176	432,985	432,799	2,320,148	1,454,364	971,188		
[3]	Agents Commissions as a % of Premium	=[2]/[1]	7.35%	7.43%	7.58%	7.62%	7.77%	7.54%	7.45%	7.39%	6.00%	plan of operation, wghted avg
[4]	On-level to current rates	Exh D-3b, col [49]	1.9640	2.0930	2.6203	3.1711	3.1464					
[5]	On-level Written Premium	=[1]*[4]	13,133,370	13,504,676	16,707,489	18,017,432	17,526,131	78,889,098	43,345,535	26,638,046		
[6]	Administration Expense	Participation Rpt	185,332	147,014	131,299	112,878	183,385	759,908	463,645	332,346		
[7]	Administration Expense as a % of On-level W Premium	=[6]/[5]	2.77%	2.28%	2.06%	1.99%	3.29%	2.47%	2.38%	2.53%	2.50%	Last 2 complete Years, rounded

AU11 Data	Market: FA	A			
s at:	2015	2014	2013	2012	2011
015 CV	1,132,651	1,146,357	1,154,637	1,225,112	1,231,562
IU	456,939	453,164	563,521	426,249	532,62
PuBus	335,996	335,504	332,452	284,681	267,866
PrBus-STR-MPA	88,158	132,473	173,447	141,425	109,25
SBus	331,965	242,613	265,995	228,486	212,22
HCCBus	15,423	11,319	14,315	20,034	21,46
TX	2,513,470	2,395,383	2,152,409	1,697,835	1,622,19
FU	-	-	-	-	-
AM	15,853	12,486	34,740	37,522	38,62
MC	1,099,578	1,092,232	1,097,747	1,049,039	962,07
ATV	213,672	196,304	166,018	144,215	106,04
SV	94,922	95,124	89,577	82,670	79,94
HV	2,961	2,111	1,677	1,861	1,97
MH	21,383	15,254	19,616	25,778	19,07
TH	1,095	1,197	1,026	5,718	10,34
GA	309,241	244,074	253,814	266,512	287,24
NO	581	1,713	1,458	1,951	2,54
DP	1,606	-	1,388	-	5
Total	6,635,494	6,377,308	6,323,837	5,639,088	5,505,12

2015		commission ratio						
Individual	Fleet	Individual	Fleet	weighted				
1,084,584	48,067	10.0%	7.5%	9.9%				
409,730	47,209	6.0%	6.0%	6.0%				
192,355	143,641	6.0%	6.0%	6.0%				
88,718	(560)	10.0%	7.5%	10.0%				
89,704	242,261	10.0%	7.5%	8.2%				
15,423	-	10.0%	7.5%	10.0%				
2,060,675	452,795	6.0%	6.0%	6.0%				
-	-	10.0%	7.5%	10.0%				
15,853	-	10.0%	7.5%	10.0%				
1,099,578	-	7.5%	7.5%	7.5%				
213,672	-	7.5%	7.5%	7.5%				
94,922	-	7.5%	7.5%	7.5%				
2,961	-	11.0%	7.5%	11.0%				
21,383	-	11.0%	7.5%	11.0%				
1,095	-	11.0%	7.5%	11.0%				
309,241	-	10.0%	7.5%	10.0%				
581	-	10.0%	7.5%	10.0%				
1,606	-	10.0%	7.5%	10.0%				
5,702,081	933,413							

Exh G-2

Page 1 of 1

Jurisidiction: Newfoundland & Labrador

Vehicle Type: Taxi

Project ID: NL-2016Q4-TX

Exh H-1

jurisdiction (short form): NL major rating class: PUB minor rating class: TX rating type: all Exh H-1 Page 1 of 1

Target Return & Alternate Return Assumptions

Assumption		Selected	Source / Formula
Γarget Retur	n & Capital Level		
[1]	Target after-tax ROE	12.0%	as directed by FA Board of Directors
[2]	Target Leverage Ratio (i.e. premium to equity)	2.00	actuarial assumption
ncome Tax			
[3]	corporate income tax rate	30.0%	PwC Insurance Industry Key tax rates and updates (2016-06)
[4]	net-of-income tax factor	70.0%	=100%-[3]
nvestment I	Return		
[5]	pre-tax investment return	2.80%	Exh F-1
[6]	after-tax investment return	1.96%	=[4]*[5]
/ariable exp	ense ratio		
[7]	variable expense ratio (discounted) - TPL	15.14%	Exh G-1, row [17] column [C]
[8]	Target weight - TPL	5,885,504	Exh C-1, for TPL - row [4] *(1+row[[22])
[9]	variable expense ratio (discounted) - other than TPL	15.14%	Exh G-1, row [15] column [C]
[10]	Target weight - other than TPL	785,417	Exh C-1, other than TPL - row [4] *(1+row[[22]
[11]	variable expense ratio (discounted) - all coverage weighted basis	15.14%	=([7]*[8]+[9]*[10])/([8]+[10])
[12]	net-of-variable expense factor	84.86%	=100%-[11]
Calculations			
[13]	Target pre-tax ROE	17.14%	=[1]/[4]
[14]	return required from operations (underwriting and investment income on	14.34%	=[13]-[5]
	policyholder funds) as a percentage of equity to meet Target pre-tax ROE		
[15]	Target Return on Premium (i.e. pre-tax return from underwriting, including	7.17%	=[14]/[2]
	associated investment income, as % of premium)		
	Iternate to be based on:		
[16]	Cost of Capital	0.00%	
			as selected (or through default); after-tax other
			than Return on Premium (which is pre-tax)
[17]	implied Alternate basis Leverage Ratio (i.e. premium to equity)	1.83	=[2]-([1]-([16]+[6]))/([12]*[4])
[18]	Alternate basis after-tax ROE	1.96%	=[16]+[6]
[19]	Alternate basis pre-tax ROE	2.80%	=[18]/[4]
[20]	return required from operations (underwriting and investment income on policyholder funds) as a percentage of equity to meet Alternate basis pre-tax ROE	0.00%	=[19]-[5]
[21]	Alternate basis Return on Premium (i.e. pre-tax return from underwriting, including associated investment income, as % of premium)	0.00%	=[20]/[17]