777 Bay Street, Suite 2400
P.O. Box 121
Toronto, Ontario
M5G 2C8

T: 416 863 1750
F: 416 868 0894
E: mail@facilityassociation.com

August 24, 2018

Oliver Wyman
120 Bremner Boulevard, Suite 800,
Toronto, Ontario
M5J 0A8

Attention: Paula Elliott

RE: FA NL **Taxi, Jitney, and Liveries Automobile Rate Application – Category 2** – Response to email dated August 8th, 2018

Dear Ms. Elliott,

Facility Association (FA) received your 10 questions in regard to FA Newfoundland and Labrador Taxi, Jitney, and Liveries Rate Filing in 2018, including 4 requests for indications based on alternative assumptions. Our responses to the questions and the summarized information tables related to the requested alternative assumption indications are provided on the pages that follow.

Best regards,

Shawn Doherty, FCIA, FCAS

SVP Actuarial & CFO

General

OW Question 1 *As presented in Exhibit D, the 2017 TPL ultimate loss cost per taxi is $6,611, an approximate increase of +38.5% from the 2016 value at $4,771 per taxi. Is FA aware of any reasons (such as a large loss or change in reserving) for this increase in the average TPL loss cost per taxi?*

FA Response to OW Question 1

The increase is a reflection of the implied LDF that was used to take accident year 2017 to ultimate. This implied LDF, as per our usual practice, was taken directly from the most recent FARM non-Private Passenger valuation result available (in this case, 2017 Q4), as discussed in section 2.b of the filing. Per Exhibit D-2, the implied LDF used was 1.74. The implied factor included for the same age-to-ultimate in our last filing was 1.41 (applied to AY 2015 recorded per the FARM 2015 AIX data set), and this had increased to 1.51 at our last rate review (applied to AY 2016 recorded per the FARM 2016 AIX data set), although that latter factor was not used as a basis for a rate filing.

We have included a summary of FARM Newfoundland & Labrador non-Private Passenger 2017-Q4 Third Party Liability reported claims experience and selected ultimate loss ratios below for reference. In particular, the selection of ultimate claims amounts for the bodily injury coverage for AY2017 would take into consideration the long-tail nature of the coverage and the relative immaturity of the accident year. As per the Appointed Actuary's usual process, resulting selected loss ratios and their changes over time are taken into consideration. These have been provided below for information.

NL FARM non-PPV Valuation Summary – BI @ Dec 31, 2017

Accident Year [1]	Earned Premium @ Dec 2017 [2] database	Paid Claims Amt @ Dec 2017 [3] database	Case Reserve @ Dec 2017 [4] = [5]-[3]	Recorded Claims Amt @ Dec 2017 [5] database	Selected IBNR @ Dec 2017 [6] database	Ultimate Claims Amt @ Dec 2017 [7] = [5]+[6]	**Selected Ultimate LR @ Dec 2017 [8] = [7]/[2]**
2007	3,224	3,712	-	3,712	-	3,712	115.1%
2008	3,335	3,184	-	3,184	-	3,184	95.5%
2009	3,741	2,996	-	2,996	-	2,996	80.1%
2010	3,928	3,965	157	4,122	-	4,122	104.9%
2011	4,093	4,037	384	4,421	-	4,421	108.0%
2012	4,208	5,143	650	5,793	-	5,793	137.7%
2013	4,414	2,839	771	3,610	-	3,610	81.8%
2014	4,844	3,432	561	3,993	(5)	3,988	82.3%
2015	4,914	2,831	2,543	5,374	82	5,456	111.0%
2016	5,128	1,511	3,326	4,837	561	5,398	105.3%
2017	5,379	521	2,258	2,779	2,066	4,845	90.1%

FA Note: we have separated OW Question 2 into two separate questions (2-paragraph 1 and 2-paragraph 2/3).

OW Question 2-paragraph 1 *In the prior review (data ending Dec 2015) the TPL 12 to ultimate factor was 1.41; and for this review the TPL 12 to ultimate factor has increased to 1.74. Explain how this* *increase in the LDF factor contributes to the increase in the ultimate loss cost per taxi noted in the question above.*

FA Response to OW Question 2-paragraph 1

FA's selected loss development factors as presented in Exhibit D-2 are factors to ultimate, and are not necessarily directly comparable to prior analyses at any individual age, due to inherent process variance.

The ultimate FARM NL Taxi TPL loss cost for AY 2017 is a direct function of the applied LDF – an alternative selection for the applied LDF would directly result in a change in the ultimate loss cost. The applied LDF for AY 2017 is 23.4% higher than the applied LDF factor for AY 2015 in our last rate filing. We are not quite clear on what the question is asking, as neither AY 2016 nor AY 2017 were included as data in the previous filing, and the respective applied LDFs for those accident years are based on the most recently available information and valuation selections. Relative to the previous filing, almost all applied LDFs have changed, as indicated in the table below (we would consider this normal course).

NL FARM TX BI LDFs – Current Filing vs Prior Filing

chg in LDF from last filing (2016 Q4 project)

	curr LDF	prior LDF	point chg	% chg
120-ult	1.0000	1.0000	-	-
108-ult	1.0000	1.0905	(0.0905)	(8.3%)
96-ult	1.0000	0.9868	0.0132	1.3%
84-ult	1.0000	1.0000	-	-
72-ult	1.0000	1.0078	(0.0078)	(0.8%)
60-ult	1.0000	1.0032	(0.0032)	(0.3%)
48-ult	0.9987	1.0506	(0.0519)	(4.9%)
36-ult	1.0153	1.0345	(0.0192)	(1.9%)
24-ult	1.1160	1.2018	(0.0858)	(7.1%)
12-ult	1.7435	1.4115	0.3320	23.5%

OW Question 2-paragraph 2/3 *It is our understanding that the driver abstract costs were $86 per taxi in the prior filing, and this estimate has increased to $123 per taxi in this filing. FA states that it applies a reconciling adjustment factor of 1.43 to reconcile the driver abstract fees to the actual costs incurred by the servicing carriers; and this may contribute to the increase.*

We understand the MVR cost is $17, $27.50 and $22.50 in NL, NS and NB respectively, and AutoPlus is $7.19 in NL, NS and NB. (Given this, we would expect the driver abstract cost to be less in NL than in NS and NB.) Provide a comparison of FA's estimate of the per taxi driver abstract costs estimated for each of NS and NB compared to NL's fee of $123; and if the fee for each taxi is higher than in NS or NB, provide the rationale for this.

FA Response to OW Question 2-paragraph 2/3

The table below compares FA's estimate of the per taxi driver abstract costs for NS, NB and NL.

FARM TX estimates of DRAs per vehicle (2017) – select provinces

	Taxi - Individually Rated				
Prov	AutoPlus Rate per Vehicle	MVR Rate per Driver	# drivers per veh from sample data	adjustment factor	estimated DRA per veh
	[1]	[2]	[3]	[4]	
NL	7.19	17.00	5.00	1.43	122.98
NB	7.19	22.30	1.90	1.56	81.49
NS	7.19	27.50	2.60	1.37	99.77

The primary cause of the differences in per vehicle costs are the estimates of the number of drivers per vehicle, which is based on sample data provided by the Servicing Carriers.

OW Question 3 (consists of 2 questions) *FA is proposing to increase its average current rate level premiums ($7,228) by +10.2% to $7,965; an increase of $737. Included in the rate level is a 10% servicing carrier fee for underwriting and handling (9% + 1%); which is $796 (=10% x $7,965) for the proposed premiums. While we understand there are different average premiums in other provinces for taxis, the same 10% of premium fee to the servicing carriers applies.*

i. *What is the comparable cost (to the $796 in NL) included in the current average rate level for taxis in NS and NB?*

FA Response to OW Question 3i

The comparable costs, based on current on-level average premiums are shown below, based on information consistent with current outstanding rate filings in those provinces (i.e. as at Nov 30, 2017 for NS and Jan 31, 2018 for NB).

NS: 10% x 2,630 = 260

NB: 10% x 4,881 = 481

OW Question 3 (continued)

ii. *Is there any supporting data to show the actual costs per taxi incurred by the servicing carriers support these differences between the provinces?*

FA Response to OW Question 3ii

No. FA does not require Servicing Carriers to provide actual costs for provision of their services, as the compensation arrangement is not on a "cost recovery" basis. Compensation is set via the Plan of Operation, i.e., we are legally obligated to pay our Servicing Carriers as specified by the Plan. It is our understanding we would be in legal non-compliance if we did not pay those amounts.

OW Question 4 *In the Board's recent Decision for PPV (A.I. 21), the Board found different HST factors for Bodily Injury and Accident Benefits to be reasonable than those FA selected for PPV, which FA has again used for this filing. Provide the rate indications based on the HST adjustment factors that the Board found to be reasonable in the prior PPV filing; and no other changes in assumptions.*

FA Response to OW Question 4

The table below provides alternative indications based on the alternative HST adjustment factors that the Board found to be reasonable in the prior PPV filing (1.0053 for BI) and (1.0142 for AccBen), with no other changes in assumptions. Note that the applicable adjustment applies only to AYs 2016 and prior (and only half the impact applies to AY 2016).

NL TX alternative indication with alternative HST impact for BI & AccBen, with no other changes

Coverage	Per Submitted Filing		OW Question 4	
	FA actuarial assumps FA Best Estimate [1]	mgmt assumps Proposed Rate Change [2]	FA actuarial assumps + alternative TPL / AccBen HST impacts [3]	mgmt assumps + alternative TPL / AccBen HST impacts [4]
Third Party Liability	26.9%	10.5%	26.2%	9.8%
Accident Benefits	21.9%	7.1%	21.9%	6.8%
Uninsured Automobile	31.3%	15.2%	29.5%	15.2%
Collision	18.5%	5.9%	17.2%	5.9%
Comp	12.0%	(0.1%)	10.7%	(0.1%)
Specified Perils	5.2%	(6.2%)	4.9%	(6.2%)
Total	**26.3%**	**10.2%**	**25.6%**	**9.5%**

OW Question 5 (consists of 2 questions) *FA states (in Section 2, page 32) that finance fee revenues for payment plans are collected by two of the servicing carriers for Taxis. In the Board's recent Decision for PPV (A.I. 21) it found the consideration of finance fee revenues in the rate level indications calculations to be appropriate. Provide*

i. the (net of bad debt) finance fee revenues as a percentage of premiums for taxis in NL, and

FA Response to OW Question 5i

The table at the top of the next page provides the payment plan programs for taxi by Servicing Carriers with the rate for fees charged as a percentage of premiums.

Newfoundland & Labrador Premium Finance Fee Offered by FA Servicing Carriers for Taxi:

RSA Payment Plan Eligibility	
Criteria	**Newfoundland**
Taxi	No
Premium Finance Fee	3%

Nordic/Novex Payment Plan Eligibility	
Criteria	**Newfoundland**
Taxi	Yes
Premium Finance Fee	3%

Co-operators Payment Plan Eligibility	
Criteria	**Newfoundland**
Taxi	Yes
Premium Finance Fee	0%

However, FA does not have direct access to:

- the costs Servicing Carriers incur in providing premium financing services,
- the expected level of bad debt costs incurred by the Servicing Carriers,
- the level of capital they believe is required to support these services

Premium financing fees are charged to reflect returns to capital providers in relation to the risk presented. Returns, by definition, are cash flows after taking into consideration costs, where risks reflect the uncertainty of the cash flows, and the amount of capital to support the "service" reflects the acceptable level of default of the capital provider, due to losses incurred in providing the "service".

In this particular case, the "service" is effectively the provision of a loan to a policyholder in the amount of the insurance policy premium, with loan repayment scheduled over the course of the policy term. The direct costs incurred by the loan provider include the direct costs of administering the program, and the uncertainty of the cash flows reflect the credit risk that is borne by the loan provider (i.e. that the loan is not repaid either on time, or completely).

To get a sense for the level of capital required to support the service, one might consider OSFI's Minimum Capital Test (MCT). Alternative determinations of capital required to support the service may reflect OSFI's capital requirements for banks for loan provisions, or for short term credit products.

Using the MCT approach, "instalment" premium is a receivable in the OSFI P&C financial return described as "*Policy premiums that are payable over several periods (multiple payments and instalments) …*" and are to be recorded on line 22 of page 20.10 (Assets) of the OSFI return. Per the 2016 MCT Guideline Chapter 6 (Credit Risk), a risk margin of 5% is applicable to instalment premium receivables outstanding less than 60 days, and a 10% risk margin is applicable to instalment premium receivable outstanding 60 days or more, as a guide and assuming 12-month terms, the average margin would be 9.2%, applicable to the "loan" balance. This margin generates the "minimum" capital level – while the level of capital relative to the minimum is up to the individual insurer, 2 times the minimum level is common. This would imply a capital level of around 18% of the loan balance. Assuming a 12% post-tax ROE (17% pre-tax), this rough calculation suggests that the return to the capital provider should be approximately 3% of the policy premium (18% x 17%).

OW Question 5 (continued)

ii. the rate indications that include this provision; and no other changes in assumptions.

FA Response to OW Question 5ii

As per our response to question 6i, FA does not have direct access to the necessary detail in order to be able to estimate a "net of bad debt" premium financing revenue (an approach that ignores administrative costs and the cost of capital).

In an effort to provide a response to this request, NLPUB's recent Decision for PPV (A.I. 21) found the consideration of finance fee revenues of 0.75% in the PPV rate level indication calculations to be appropriate. The table immediately below provides alternative indications based on the alternative finance fee revenues of 0.75%, with no other changes in assumptions.

NL TX alternative indication with alternative to include premium finance revenue net of bad debt (estimated impact 0.75%), with no other changes

	Per Submitted Filing		OW Question 5	
	FA actuarial assumps	mgmt assumps	FA actuarial assumps	mgmt assumps
Coverage	FA Best Estimate [1]	Proposed Rate Change [2]	+ alternative premium financing adj 0.75% [3]	+ alternative premium financing adj 0.75% [4]
Third Party Liability	26.9%	10.5%	25.5%	9.4%
Accident Benefits	21.9%	7.1%	20.6%	6.0%
Uninsured Automobile	31.3%	15.2%	29.9%	14.1%
Collision	18.5%	5.9%	17.2%	4.8%
Comp	12.0%	(0.1%)	10.8%	(1.1%)
Specified Perils	5.2%	(6.2%)	4.1%	(7.2%)
Total	**26.3%**	**10.2%**	**24.9%**	**9.1%**

OW Question 6 *FA has not provided an update to its indicated territory differentials. Is an updated analysis using the experience through to December 2017 available?*

FA Response to OW Question 6

No, a territory differentials analysis using the experience through to December 2017 was not performed.

FA Experience Loss Development Factors (Ultimate Claim Amount Selections)

OW Question 7 *Explain why the Weighted Method was selected for some accident-half years instead of the BF method for Bodily Injury and Accident Benefits coverages.*

FA Response to OW Question 7

The *general* approach of FA's Appointed Actuary (Liam McFarlane of Ernst & Young) is to have a default method selection by *development age*, migrating from a priori (or "expected loss") to the link ratio method via various weighting methodologies based on the AA's assessment of the nature of the coverage and its associated development volatility and other characteristics, taking into account the scheduled quarterly valuation review, changes in volume and changes in mix of business, case reserve levels and open claims, and the assessment of the strengths and weaknesses of various valuation methodologies, as well as his assessment of the nature of the coverage and its associated development volatility and other characteristics.

The AA's final method selection for each *accident period* takes into consideration the accident period's current age (and hence the default method selection), characteristics of the accident period itself, and additional considerations beyond aggregate claims experience.

The ELR/Link Ratio weighted methodology allows FA's Appointed Actuary to place more weight on the ELR method relative to what the B-F method would imply while continuing to migrate towards a Link Ratio/Incurred-to-date estimate in a systematic fashion. This method would generally be used for coverages with longer reporting periods (such as accident benefits and bodily injury), giving consideration to the nature of the FARM (rapid changes in mix of business, low volumes and higher exposure to large losses), and varying potential reporting practices for FA's Servicing Carriers.

OW Question 8 *As a sensitivity test, provide the rate indications by substituting the B-F Method instead of the Weighted Method, for Bodily Injury and Accident Benefits; and no other changes in the assumptions.*

FA Response to OW Question 8

The tables on the next page compare the FA selected ultimate losses to the alternative ultimate losses if the results of the B-F Method for BI and AccBen were selected.

NL non-PPV selected ultimate losses and alternative ultimate losses for BI

31-12-2017	Body Injury						
Accident Year	FA Recorded Indemnity	FA Selected Ultimate	FA Selected Method	OW Alt Ultimate - NL TX Que 8	OW NL TX Que 8 Method	$ Difference of Alt Ult. To FA Selection	% Difference of Alt Ult. To FA Selection
Year	[1]	[2]	[3]	[4]	[5]	[6] =[4] - [2]	[7] =[4] / [2] - 1
2008	2,812,640	2,812,640	Incurred (Zero IBNR)	2,812,640	Incurred (Zero IBNR)	-	-
2009	2,531,941	2,531,941	Incurred (Zero IBNR)	2,531,941	Incurred (Zero IBNR)	-	-
2010	3,661,926	3,661,926	Incurred (Zero IBNR)	3,661,926	Incurred (Zero IBNR)	-	-
2011	3,685,228	3,685,228	Incurred (Zero IBNR) / Link Ratio	3,685,228	Incurred (Zero IBNR) / Link Ratio	-	-
2012	5,179,476	5,179,476	Link Ratio	5,179,476	Link Ratio	-	-
2013	3,097,152	3,097,152	Link Ratio	3,097,152	Link Ratio	-	-
2014	3,245,945	3,240,945	Link Ratio / B-F	3,240,945	Link Ratio / B-F	-	-
2015	4,442,817	4,524,817	B-F	4,524,817	B-F	-	-
2016	4,013,338	4,546,338	B-F / Wtd	4,207,338	B-F	(339,000)	(7.5%)
2017	2,128,004	4,109,004	Wtd	3,217,004	B-F	(892,000)	(21.7%)
Total	34,798,467	37,389,467	-	36,158,467	-	(1,231,000)	(3.3%)

NL non-PPV selected ultimate losses and alternative ultimate losses for AccBen

31-12-2017	Accident Benefits						
Accident Year	FA Recorded Indemnity	FA Selected Ultimate	FA Selected Method	OW Alt Ultimate - NL TX Que 8	OW NL TX Que 8 Method	$ Difference of Alt Ult. To FA Selection	% Difference of Alt Ult. To FA Selection
Year	[1]	[2]	[3]	[4]	[5]	[6] =[4] - [2]	[7] =[4] / [2] - 1
2008	161,065	161,065	Incurred (Zero IBNR)	161,065	Incurred (Zero IBNR)	-	-
2009	163,932	163,932	Incurred (Zero IBNR)	163,932	Incurred (Zero IBNR)	-	-
2010	323,108	323,108	Incurred (Zero IBNR)	323,108	Incurred (Zero IBNR)	-	-
2011	313,280	313,280	Incurred (Zero IBNR)	313,280	Incurred (Zero IBNR)	-	-
2012	743,320	743,320	Incurred (Zero IBNR)	743,320	Incurred (Zero IBNR)	-	-
2013	206,718	210,718	Incurred (Zero IBNR) / B-F	210,718	Incurred (Zero IBNR) / B-F	-	-
2014	169,439	196,439	B-F	196,439	B-F	-	-
2015	488,551	531,551	B-F	531,551	B-F	-	-
2016	311,050	442,050	B-F / Wtd	374,050	B-F	(68,000)	(15.4%)
2017	149,095	421,095	Wtd	259,095	B-F	(162,000)	(38.5%)
Total	3,029,558	3,506,558	-	3,276,558	-	(230,000)	(6.6%)

The table on the next page provides alternative indications based on the alternative ultimate for BI and AccBen, with no other changes in assumptions.

NL TX alternative indication with alternative ultimate for BI & AccBen, with no other changes

Coverage	Per Submitted Filing		OW Question 8	
	FA actuarial assumps FA Best Estimate [1]	mgmt assumps Proposed Rate Change [2]	FA actuarial assumps + alternative ult for BI and AccBen [3]	mgmt assumps + alternative ult for BI and AccBen [4]
Third Party Liability	26.9%	10.5%	23.0%	7.1%
Accident Benefits	21.9%	7.1%	16.2%	1.9%
Uninsured Automobile	31.3%	15.2%	31.3%	15.2%
Collision	18.5%	5.9%	18.5%	5.9%
Comp	12.0%	(0.1%)	12.0%	(0.1%)
Specified Perils	5.2%	(6.2%)	5.2%	(6.3%)
Total	**26.3%**	**10.2%**	**22.6%**	**6.9%**

Loss Trend Rates

OW Question 9 *As a sensitivity measure, provide the rate indications based on the Board's Guideline commercial vehicle loss trend rates as of June 30, 2017 instead of those selected by FA.*

FA Response to OW Question 9

The table below provides alternative indications based on the Board's Guideline CV loss trend rates as of June 30, 2017, with no other changes in assumptions.

NL TX alternative indication with alternative loss cost trends, with no other changes

	Per Submitted Filing		OW Question 9	
Coverage	FA actuarial assumps FA Best Estimate [1]	mgmt assumps Proposed Rate Change [2]	FA actuarial assumps + alternative using Benchmark LC trends [3]	mgmt assumps + alternative using Benchmark LC trends [4]
Third Party Liability	26.9%	10.5%	26.6%	10.2%
Accident Benefits	21.9%	7.1%	54.5%	35.5%
Uninsured Automobile	31.3%	15.2%	60.7%	41.1%
Collision	18.5%	5.9%	18.0%	5.3%
Comp	12.0%	(0.1%)	14.3%	1.9%
Specified Perils	5.2%	(6.2%)	12.7%	0.5%
Total	**26.3%**	**10.2%**	**29.0%**	**12.5%**