

TO: MEMBERS OF THE FACILITY ASSOCIATION

**ATTENTION: CHIEF EXECUTIVE OFFICER
NOVA SCOTIA RISK SHARING POOL PROJECT MANAGER**

BULLETIN NO.: F19 – 032

DATE: APRIL 29, 2019

**SUBJECT: NOVA SCOTIA RISK SHARING POOL
– MARCH 2019 OPERATIONAL REPORT**

A copy of this bulletin should be provided to your Chief Financial Officer and Appointed Actuary.

Please be advised that the March 2019 Nova Scotia Risk Sharing Pool Operational Report is now available on the Facility Association (FA) Portal at <https://portal.facilityassociation.com>.

New This Month

Valuation

A valuation of the Nova Scotia Risk Sharing Pool (“RSP”) as at December 31, 2018 has been completed since last month’s Operational Report and the results of that valuation have been incorporated into this month’s Operational Report. The valuation was completed by the Facility Association’s internal staff in conjunction with, and reviewed and approved by, the Appointed Actuary.

The implementation of the new valuation resulted in an estimated overall **\$0.4 million favourable** impact on the month’s net result from operations, subtracting an estimated 5.1 points to the year-to-date Combined Operating Ratio (ending at 124.0%). The impact is summarized in the tables immediately below¹.

NS	unfav / (fav) for the month and ytd						ytd EP 7,263 (actual)					
	IMPACT in \$000s from changes in:						IMPACT unfav / (fav) as % ytd EP from changes in:					
	ults & payout patterns			dsct rate	margins		ults & payout patterns			dsct rate	margins	
	Nominal	apv adj.	sub-tot	apv adj.	apv adj.	TOTAL	Nominal	apv adj.	sub-tot	apv adj.	apv adj.	TOTAL
	[1]	[2]	[3]	[4]	[5]	[6]	[1]	[2]	[3]	[4]	[5]	[6]
PAYs	(825)	19	(806)	317	-	(489)	(11.4%)	0.3%	(11.1%)	4.4%	-	(6.7%)
CAY	(15)	(6)	(21)	64	-	43	(0.2%)	(0.1%)	(0.3%)	0.9%	-	0.6%
Prem Def	(29)	(15)	(44)	123	-	79	(0.4%)	(0.2%)	(0.6%)	1.7%	-	1.1%
TOTAL	(869)	(2)	(871)	504	-	(367)	(12.0%)	-	(12.0%)	6.9%	-	(5.1%)

¹In the tables, “ults & payout patterns” refers to the impacts associated with changes in selected ultimates and updated cashflows of claims payments; “dsct rate” refers to the impact of changes in the selected discount rate applied to projected cashflows; and “apv adj.” refers to “actuarial present value adjustments”.

Bulletin F19-032
Nova Scotia Risk Sharing Pool – March 2019 Operational Report

Please see “Effect of Quarterly Valuation” on page 4 for additional valuation result detail.

Summary of Financial Results

The calendar year-to-date Operating Result is -\$1.7 million and the incurred loss ratio to the end of 3 months is 93.7%, as summarized in the table below.

Amounts in \$000s	March 2019	March 2018	Year to date Mar 2019	Year to Date Mar 2018
Premium Written	2,462	2,164	6,357	5,623
Premium Earned	2,521	2,282	7,263	6,467
Incurred Losses	1,949	(22)	6,804	4,104
Underwriting & Admin Expense	896	902	2,199	2,051
Operating Result	(324)	1,402	(1,740)	312
<i>Ratios:</i>				
Loss ratio				
- Prior Accident Years	(24.0%)	(101.8%)	(7.6%)	(35.7%)
- Current Accident Year	101.3%	100.9%	101.3%	99.2%
<i>Total</i>	77.3%	(0.9%)	93.7%	63.5%
<i>Underwriting & Admin Expense</i>	35.5%	39.5%	30.3%	31.7%
<i>Combined Operating Ratio</i>	112.8%	38.6%	124.0%	95.2%

rounding differences may occur

These results are discussed in some detail in the “Current Month Results” section. For additional numeric details, please refer to Exhibit 1 “Summary of Operations for Calendar Year 2019” attached to this bulletin.

Updated Projection to Year-end 2019

The projected calendar year Operating Result to December 2019 is -\$10.6 million and the estimated combined operating ratio to December 2019 is 134.5%, as summarized in the table at the top of the next page.

NS RSP 2019 Yr-end Projection Amounts in \$000s	Current (Mar 2019)	Prior Mth (Feb 2019)	Change	Final 2019 Outlook*
Premium Written	31,862	31,823	39	31,089
Premium Earned	30,733	30,718	15	30,272
Incurred Losses	29,792	30,242	(450)	30,014
Underwriting & Admin Expense	11,531	11,450	81	11,148
Net Result from Operations	(10,590)	(10,974)	384	(10,890)
Ratios:				
Loss ratio - Prior Accident Years	(3.4%)	(1.4%)	(2.0%)	(1.5%)
- Current Accident Year	100.4%	99.9%	0.5%	100.7%
<i>Total</i>	97.0%	98.5%	(1.5%)	99.2%
Underwriting & Admin Expense	37.5%	37.3%	0.2%	36.8%
Combined Operating Ratio	134.5%	135.8%	(1.3%)	136.0%

rounding differences may occur

*as posted to FA's website Oct. 18, 2018

This updated projection to the end of the year has improved by \$0.4 million from the projection provided last month (-\$11.0 million and 135.8%), and included the overall \$0.3 million favourable impact of the December 31, 2018 valuation, as summarized in the table below (see also the “Effect of Quarterly Valuation” on page 4). Remaining differences were driven by changes in projected premium volumes, and the associated impacts on claims and expense projections.

NS	unfav / (fav) projected for full year						year EP 17,246 (projected this month)					
	IMPACT in \$000s from changes in:						IMPACT unfav / (fav) as % full year EP from changes in:					
	ults & payout patterns		dsct rate	margins		TOTAL	ults & payout patterns		dsct rate	margins		TOTAL
Nominal	apv adj.	sub-tot	apv adj.	apv adj.	TOTAL	Nominal	apv adj.	sub-tot	apv adj.	apv adj.	TOTAL	
[1]	[2]	[3]	[4]	[5]	[6]	[1]	[2]	[3]	[4]	[5]	[6]	
PAYs	(825)	15	(810)	266	-	(544)	(4.8%)	0.1%	(4.7%)	1.5%	-	(3.2%)
CAY	(61)	(40)	(101)	239	-	138	(0.4%)	(0.2%)	(0.6%)	1.4%	-	0.8%
Prem Def	(50)	(19)	(69)	145	-	76	(0.3%)	(0.1%)	(0.4%)	0.8%	-	0.4%
TOTAL	(936)	(44)	(980)	650	-	(330)	(5.4%)	(0.3%)	(5.7%)	3.8%	-	(1.9%)

Current Month Results

The Nova Scotia Risk Sharing Pool produced a -\$0.3 million Operating Result in the month of March 2019, a \$1.7 million deterioration from the same month last year. This deterioration is composed of a \$1.9 million deterioration stemming from the overall increase in the combined ratio (from 38.6% to 112.8% applied to \$2.5 million in earned premium), offset by a \$0.2 million improvement associated with the \$0.5 million increase in earned premium (at a combined ratio of 38.6%). The primary driver of the difference in combined ratios is the difference in the respective valuation implementation impacts.

This month's results moved the year-to-date combined operating ratio from 129.9% at the end of 2 months to 124.0% at the end of 3 months. The 5.9 percentage point decrease is composed of a 8.7 percentage point decrease in the Prior Accident Years loss ratio, offset by a 2.8 percentage point increase in the expense ratio.

Variations from Projections

The table below provides a summary of key components of the operating results as compared to the estimates projected last month.

March 2019	Actual	Projection	Difference	Difference %
Written Premium	2,462	2,423	39	1.6%
Earned Premium	2,521	2,548	(27)	(1.1%)
Reported Losses				
Paid Losses	2,389	1,245	1,144	91.9%
Paid Expenses	67	71	(4)	(5.6%)
Change in Outstanding Losses	(316)	326	(642)	(196.9%)
Total Reported Losses	2,140	1,642	498	30.3%
Change in IBNR Provision *	(191)	865	(1,056)	
Change in Premium Deficiency (DPAC) *	92	13	79	

(Amounts in \$000's)

rounding differences may occur

*Detailed information is included at [Nova Scotia RSP March 2019 Operational Report - Actuarial Highlights](#).

Each month, management reviews the variance between reported premium activity and claims activity (actual reported claims payments and changes in case reserves) and the associated actuarial projections. The projection process involves many assumptions including claims reporting patterns. Actual reporting patterns vary from month-to-month, sometimes considerably. Although variances from our projections are expected, management investigates variances beyond set thresholds and responds as appropriate.

For the month of March 2019, reported losses were \$0.5 million higher than projected. The Current Accident Year had a \$0.1 million unfavourable variance in reported losses, and the Prior Accident Years had a \$0.4 million unfavourable variance. No single Prior Accident Year had a reported loss variance in excess of \$1.0 million.

Effect of Quarterly Valuation

The March 2019 Nova Scotia Risk Sharing Pool Operational Report reflects the results of an updated valuation as at December 31, 2018, with the associated impacts in relation to the results for March 2019 summarized in the table immediately below.

NS	unfav / (fav) for the month and ytd						mth EP 2,521 (actual)					
	IMPACT in \$000s from changes in:						IMPACT unfav / (fav) as % mth EP from changes in:					
	ulsts & payout patterns			dsct rate		margins	ulsts & payout patterns			dsct rate		margins
Nominal	apv adj.	sub-tot	apv adj.	apv adj.	TOTAL	Nominal	apv adj.	sub-tot	apv adj.	apv adj.	TOTAL	
[1]	[2]	[3]	[4]	[5]	[6]	[1]	[2]	[3]	[4]	[5]	[6]	
PAYs	(825)	19	(806)	317	-	(489)	(32.7%)	0.8%	(32.0%)	12.6%	-	(19.4%)
CAY	(15)	(6)	(21)	64	-	43	(0.6%)	(0.2%)	(0.8%)	2.5%	-	1.7%
Prem Def	(29)	(15)	(44)	123	-	79	(1.2%)	(0.6%)	(1.7%)	4.9%	-	3.1%
TOTAL	(869)	(2)	(871)	504	-	(367)	(34.5%)	(0.1%)	(34.5%)	20.0%	-	(14.6%)

The valuation result is due to changes generated from updated nominal ultimate selections and projected cash flows (generating a \$0.9 million favourable impact – see column [3] in the left table above), partially offset by the impact due to a 35 basis point decrease in the selected discount rate

(from 2.28% to 1.93% generating a \$0.5 million unfavourable impact – see column [4] in the left table at the bottom of the previous page). There was no change in the margin for adverse deviation in investment yield (remains at 25 basis points), and our usual practice is to only update margins for adverse deviation for claims development (selected at the coverage / accident year level) at the June 30 valuation, these were also left unchanged (hence \$0 in column [5] in the left table above).

Management has observed favourable *total* valuation impacts over the last 12 valuation implementations, with 5 valuation implementations being favourable over that 12-quarter period, as shown in column [5] of the table immediately below (summarizing the same information as provided in the left table above as relates to the most recent 12 valuation implementations). It should be noted that the impacts in column [3] are largely outside of the control of FA (as being related to macroeconomic factors).

RSP: Nova Scotia, as at: 2018 Q4		unfavourable / (favourable) Valuation Implementation Impact (\$000s)					\$000s		
Valuation	period implemented	updated LRs & exp	APVs @ prior assumptions	updated dsct rate	updated margins	Total Impact	Booked Policy Liabilities	Total Impact as % Book Liabs	Nominal Impact as % Book Liabs
		[1]	[2]	[3]	[4]	[5] = sum([1] to [5])	[6]	[7] = [5] / [6]	[8] = [1] / [6]
2016 Q1	May 2016	294	94	33	-	421	41,963	1.0%	0.7%
2016 Q2	Aug 2016	(92)	(43)	67	(918)	(986)	43,376	(2.3%)	(0.2%)
2016 Q3	Oct 2016	836	88	62	-	986	45,643	2.2%	1.8%
2016 Q4	Mar 2017	(1,416)	(140)	(535)	-	(2,091)	43,088	(4.9%)	(3.3%)
2017 Q1	May 2017	103	10	92	-	205	45,635	0.4%	0.2%
2017 Q2	Aug 2017	(3,429)	(363)	(286)	(87)	(4,165)	47,893	(8.7%)	(7.2%)
2017 Q3	Oct 2017	1,696	89	(760)	-	1,025	52,341	2.0%	3.2%
2017 Q4	Mar 2018	(2,038)	26	-	-	(2,012)	52,371	(3.8%)	(3.9%)
2018 Q1	May 2018	1,505	96	(256)	-	1,345	56,182	2.4%	2.7%
2018 Q2	Aug 2018	68	(50)	95	(51)	62	59,463	0.1%	0.1%
2018 Q3	Oct 2018	869	137	(635)	-	371	62,791	0.6%	1.4%
2018 Q4	Mar 2019	(869)	(2)	504	-	(367)	62,820	(0.6%)	(1.4%)
12-qtrs	-	(2,473)	(58)	(1,619)	(1,056)	(5,206)			
% of total		47.5%	1.1%	31.1%	20.3%	100.0%			
Averages									
12-qtrs		(206)	(5)	(135)	(88)	(434)	51,131	(0.8%)	(0.4%)
2016 Q1 to 2017 Q4		(506)	(30)	(166)	(126)	(827)	46,539	(1.8%)	(1.1%)
2018 Q1 to 2018 Q4		393	45	(73)	(13)	353	60,314	0.6%	0.7%

The FA valuation approach is focused on providing (i) best estimates on a nominal basis (i.e. the longer term average of nominal changes in column [1] should be close-to-zero); (ii) the nominal changes of any one valuation in relation to policy liabilities², should be “small” (less than 2.5%); and (iii) the valuation results should not indicate bias – that is, we generally anticipate approximately 1/3rd of nominal valuation impacts will be unfavourable, and 2/3rds will be favourable (due to the skewness of the development). On these 3 measures:

- (i) **Best estimate measurement: This objective has not been met**, as the 12-quarter nominal change in column [1] is \$2.5 million favourable. That said, the average favourable impact over the 12 quarters at \$0.2 million (nominal only) represents

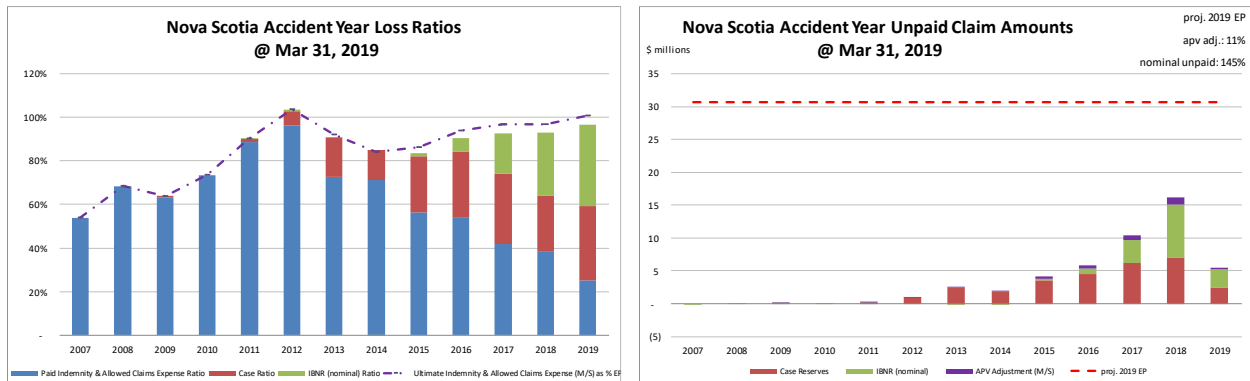
²We also consider changes in nominal estimates relative to beginning claims liabilities, with this metric also ideally being small, but in this case, less than 5.0%. Over time, our view of “small” for each of these metrics may change.

0.4% of ending policy liabilities per column [8], which we would view as not significant. We do note that the latest 4 valuations have been on average less unfavourable than the earlier 8 valuations were favourable.

- (ii) **Nominal size measurement: This objective has not been met**, as there were 5 individual valuations showing nominal changes in excess of 2.5% of ending policy liabilities per column [8] in the table above.
- (iii) **Bias evidence measurement: This objective has not been met**, as 7 of 12 valuations show unfavourable changes (column [1] of the table above), higher than our expectation (4 of 12).

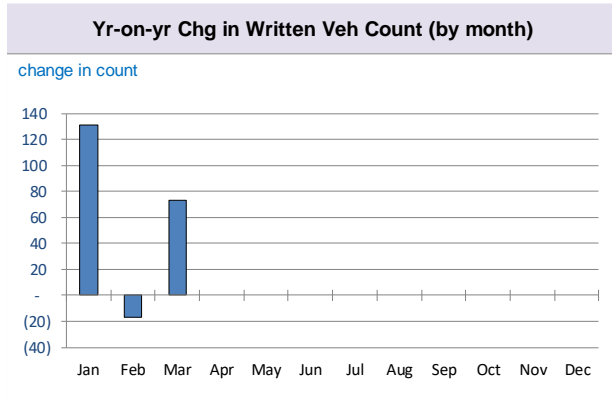
In summary, while challenging as a small RSP, we believe the nominal valuation impacts are moving toward our target impacts (long term zero impact; individual valuation impact of no more than 2.5% of policy liabilities; no bias evident).

The charts immediately below summarize the current view of the historical loss ratios (indemnity and allowed claims adjustment expenses on a nominal basis) and the associated claims liabilities.

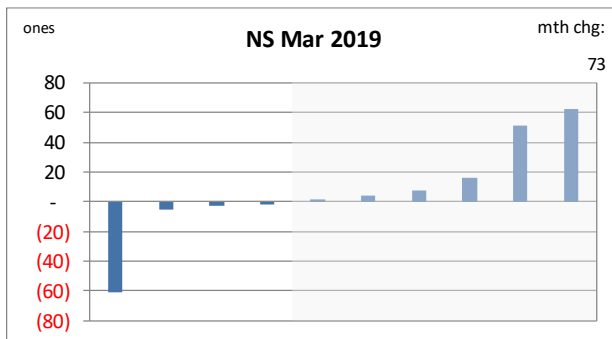


The preceding charts, latest valuation results, and related actuarial present value assumption updates are discussed in more detail in the [Nova Scotia RSP March 2019 Operational Report – Actuarial Highlights](#). The Actuarial Quarterly Valuation Highlights for Risk Sharing Pools as at December 31, 2018 is expected to be posted in June 2019. The actuarial valuation will be updated next as at March 31, 2019 and we anticipate that the results will be reflected in the May 2019 Operational Report.

Management Comments

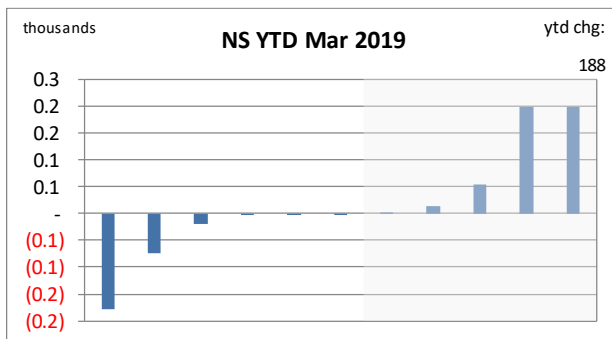


The chart on the left shows the year-on-year change in the vehicles transferred to the pool by month, with March showing an increase of 73 vehicles. Our projection last month (in part based on previous projections provided by select member company groups) was for an increase of 97 vehicles, indicating a variance of 24 from the actual transfers. This variance was mainly due to one member company group transferring a lower number of vehicles to the pool in March than projected.



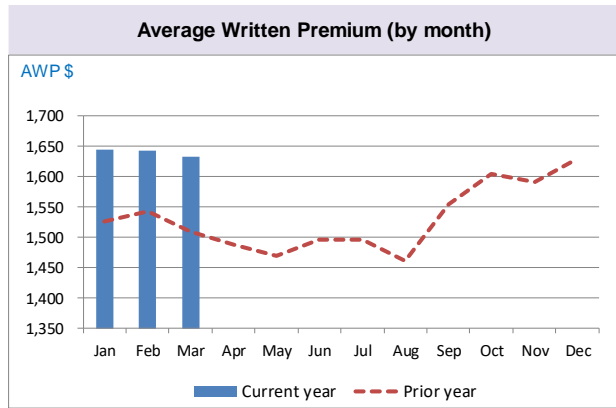
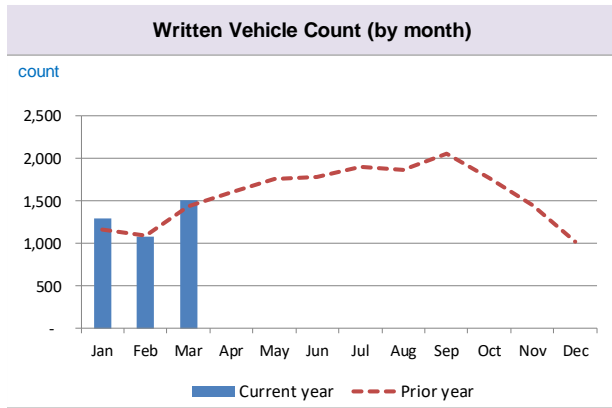
The chart on the left shows the overall change in the **month**, broken down by member company group changes (each blue bar represents the change for a single member company group), sorted by magnitude of change. Four member company groups transferred fewer vehicles to the pool this month compared with a year ago, while six transferred more. Of the 4 member company groups transferring fewer vehicles, 1 member company

group accounted for 87% of the total transfer decrease for these “decliner” members. Of the 6 member company groups transferring more vehicles, 2 member company groups accounted for 79% of the total transfer increase for these “grower” members.



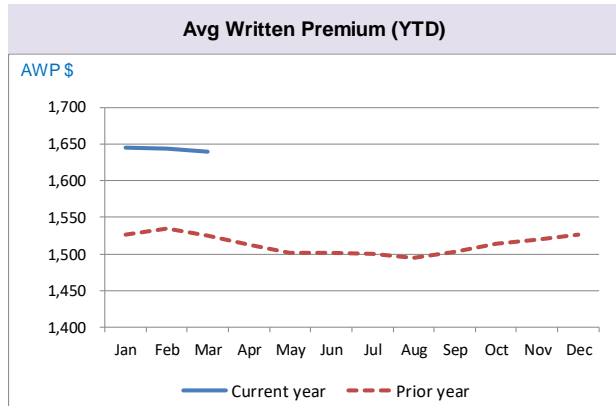
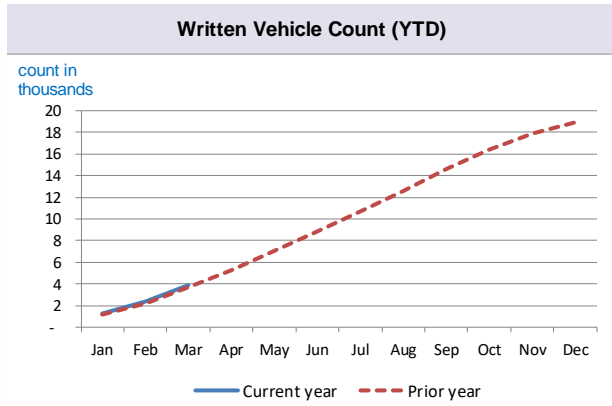
The chart on the left presents the same information as the previous chart, but on a **year-to-date** basis. That is, it shows the overall change in transfer counts year-to-date, broken down by member company group changes (each blue bar represents the change for a single member company group), sorted by magnitude of change.

March’s vehicle count transfers to the pool represent a 5.1% increase from March 2018, and vehicle counts were up 5.1% year-to-date. Average written premium was up 8.2% in March 2019, and was up 7.5% year-to-date (see charts at the top of the next page).



	Mar-19	Mar-18	Amt Chg	% Chg
W. Veh curr mth	1,507	1,434	73	5.1%

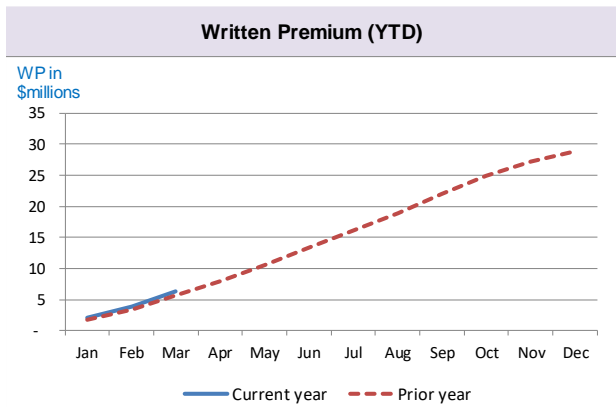
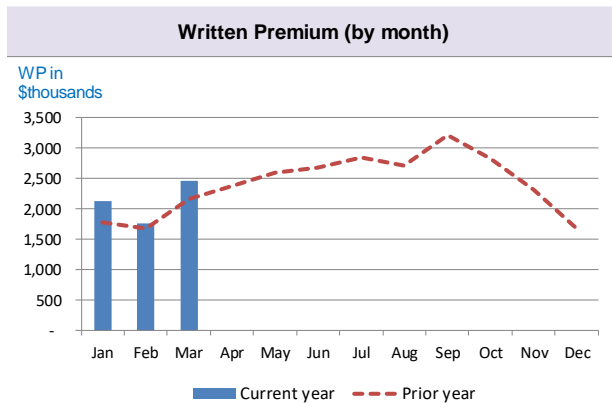
	Mar-19	Mar-18	Amt Chg	% Chg
AWP curr mth	1,633	1,509	124	8.2%



	Mar-19	Mar-18	Amt Chg	% Chg
W. Vehicles YTD	3,876	3,688	188	5.1%

	Mar-19	Mar-18	Amt Chg	% Chg
Avg W. Prem YTD	1,640	1,525	115	7.5%

As a result of the movements in transfer vehicle counts and average written premium, the transferred premium was up 13.8% for the month compared with the 12.0% increase we projected last month, and was up 13.0% year-to-date (see charts immediately below).



	Mar-19	Mar-18	Amt Chg	% Chg
WP (\$000s) curr mth	2,462	2,164	298	13.8%

	Mar-19	Mar-18	Amt Chg	% Chg
WP (\$000s) YTD	6,356	5,624	733	13.0%

Bulletin F19-032

Nova Scotia Risk Sharing Pool – March 2019 Operational Report

Should you require any further information, please call Norm Seeney, Vice President, Finance and Member Services at (416) 644-4914.

Saskia Matheson
President & CEO

Related links:

[Nova Scotia RSP March 2019 Operational Report – Actuarial Highlights](#)

SUMMARY OF OPERATIONS - CALENDAR YEAR 2019

Risk Sharing Pool - Nova Scotia

Operating Results for the 3 Months Ended March 31, 2019 (Discounted basis)

Source: Monthly Operational Report

(thousands of dollars)

EXHIBIT 1

	January	February	March	CY2019 YTD	CY2019 12 MONTHS Updated Projection	CY2018 12 MONTHS Actual
Underwriting Revenue:						
Net Premiums Written	\$2,126	\$1,769	\$2,462	\$6,357	\$31,862	\$28,869
Decrease (Increase) in Unearned Premiums	368	479	59	906	(1,129)	(1,213)
Net Premiums Earned	\$2,494	\$2,248	\$2,521	\$7,263	\$30,733	\$27,656
Claims Incurred:						
Prior Accident Years:						
Undiscounted	(\$14)	(\$17)	(\$834)	(\$865)	(\$865)	\$195
Effect of Discounting	153	(70)	228	311	(191)	(683)
Discounted	\$139	(\$87)	(\$606)	(\$554)	(\$1,056)	(\$488)
Current Accident Year:						
Undiscounted	\$2,422	\$2,185	\$2,429	\$7,036	\$29,637	\$25,819
Effect of Discounting	115	81	126	322	1,211	872
Discounted	\$2,537	\$2,266	\$2,555	\$7,358	\$30,848	\$26,691
Claims Incurred	\$2,676	\$2,179	\$1,949	\$6,804	\$29,792	\$26,203
Underwriting Expenses:						
Expense Allowance	\$659	\$549	\$763	\$1,971	\$9,879	\$8,714
Change in UPDR/DPAC:						
Undiscounted	10	15	(13)	12	425	537
Effect of Discounting	(16)	(22)	105	67	201	(86)
Discounted	(6)	(7)	92	79	626	451
Underwriting Expenses	\$653	\$542	\$855	\$2,050	\$10,505	\$9,165
Net Underwriting Gain (Loss)	(\$835)	(\$473)	(\$283)	(\$1,591)	(\$9,564)	(\$7,712)
Administrative Expenses	\$49	\$59	\$41	\$149	\$1,026	\$608
Operating Result	(\$884)	(\$532)	(\$324)	(\$1,740)	(\$10,590)	(\$8,320)
Ratios:						
Claims & Expenses Incurred (Earned)						
Prior Accident Years	5.6%	-3.9%	-24.0%	-7.6%	-3.4%	-1.8%
Current Accident Year	101.7%	100.8%	101.3%	101.3%	100.4%	96.5%
All Accident Years Combined	107.3%	96.9%	77.3%	93.7%	97.0%	94.7%
Underwriting & Administrative Expenses (Earned)	28.1%	26.7%	35.5%	30.3%	37.5%	35.3%
Combined Operating Ratio	135.4%	123.6%	112.8%	124.0%	134.5%	130.0%

Note: Amounts shown above do not reflect costs incurred directly by member companies e.g. income and premium taxes, health levies, association dues, cost of capital as a result of their compulsory participation in Facility Association and investment income earned on Facility Association premium dollars invested directly by members.

Rounding difference may apply