

TO: MEMBERS OF THE FACILITY ASSOCIATION

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

BULLETIN NO.: F2020 – 049

DATE: JUNE 29, 2020

**SUBJECT: NOVA SCOTIA RISK SHARING POOL
– MAY 2020 OPERATIONAL REPORT**

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

Please be advised that the May 2020 Nova Scotia Risk Sharing Pool Operational Report is available on the Facility Association (FA) Portal at <https://portal.facilityassociation.com>.

Key Points

- (a) The updated valuation loss ratios include an initial assessment of the incurred impacts associated with the COVID-19 pandemic;
- (b) This month's results include the *implementation of the 2020 Q1 valuation*, resulting in an estimated *\$1.2 million unfavourable impact*;
- (c) The *2020 year-to-date net operating deficit was \$7.6 million*, with a COR of 154.8% on earned premium of \$13.9 million; and
- (d) The *projected 2020 year-end net operating deficit is now \$19.7 million*, with a COR at 156.4% on earned premium of \$34.9 million (our Outlook for 2020 was \$14.5 million of net operating deficit with a COR of 140.5% on earned premium of \$35.8 million); this update reflects current assumptions under the 2020 Q1 valuation as well as updated written premium projections received from certain members; and
- (e) As per the annual process for the RSPs, member share ratios have been updated to reflect recent market share information.

New This Month

Annual Update of Member Sharing Ratios

The May 2020 Operational Report reflects the annual update of member sharing ratios for Accident Years 2018, 2019, 2020 and 2021. Please refer to Bulletin [F2020-044](#) for additional information.

Valuation

A valuation of the Nova Scotia Risk Sharing Pool (“RSP”) as at March 31, 2020 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 **\$1.2 million unfavourable** impact on the month's net result from operations, adding an estimated 8.7 points to the year-to-date Combined Operating Ratio (ending at 154.8 %). The impact is summarized in the following tables¹.

NS	unfav / (fav) for the month and ytd						ytd EP 13,850 (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	148	(7)	141	1,250	-	1,391	1.1%	(0.1%)	1.0%	9.0%	-	10.0%
CAY	(491)	(35)	(526)	381	-	(145)	(3.5%)	(0.3%)	(3.8%)	2.8%	-	(1.0%)
Prem Def	(484)	(44)	(528)	489	-	(39)	(3.5%)	(0.3%)	(3.8%)	3.5%	-	(0.3%)
TOTAL	(827)	(86)	(913)	2,120	-	1,207	(6.0%)	(0.6%)	(6.6%)	15.3%	-	8.7%

Please see "Effect of Quarterly Valuation" on page 5 for additional valuation result detail.

Summary of Financial Results

The calendar year-to-date Operating Result is -\$7.6 million and the incurred loss ratio to the end of 5 months is 120.3%, as summarized in the following table.

NS RSP Summary of Financial Results (for month and year-to-date)

Amounts in \$000s	May 2020	May 2019	Year to date May 2020	Year to Date May 2019
Premium Written	2,367	2,593	11,921	11,688
Premium Earned	2,859	2,347	13,850	12,077
Incurred Losses	4,283	4,293	16,655	13,509
Underwriting & Admin Expense	761	1,270	4,773	4,400
Operating Result	(2,185)	(3,216)	(7,578)	(5,832)
Ratios:				
Loss ratio				
- Prior Accident Years	45.2%	63.1%	11.0%	7.2%
- Current Accident Year	104.6%	119.8%	109.3%	104.6%
<i>Total</i>	149.8%	182.9%	120.3%	111.8%
Underwriting & Admin Expense	26.6%	54.1%	34.5%	36.4%
Combined Operating Ratio	176.4%	237.0%	154.8%	148.2%

rounding differences may occur

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

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 2020” attached to this bulletin.

Updated Projection to Year-end 2020

PLEASE NOTE: With the current May operational report, premium projections have been updated to reflect the most recent information provided by certain members. Updated claims assumptions are derived from the current valuation, as at March 31, 2020, and include an assessment of, and adjustments related to, the COVID-19 pandemic impact. May’s reported claims projections include an additional 10% decrease in Current Accident Year reported claims activity - reducing the projected reported activity over the next 2 months and spreading over the remainder of the year, reflecting a shift in Current Accident Year claims reporting and emergence patterns due to the COVID-19 pandemic impact.

The projected calendar year Operating Result to December 2020 is -\$19.7 million and the estimated combined operating ratio to December 2020 is 156.4%, as summarized in the following table.

NS RSP Summary of Projected Year-end Financial Results (current month’s projection, prior month’s projection, and Outlook posted last fall)

NS RSP 2020 Yr-end Projection Amounts in \$000s	Current (May 2020)	Prior Mth (Apr 2020)	Change	Final 2020 Outlook*
Premium Written	38,854	38,866	(12)	38,176
Premium Earned	34,878	35,679	(801)	35,830
Incurred Losses	38,433	38,505	(72)	36,407
Underwriting & Admin Expense	16,108	15,406	702	13,949
Net Result from Operations	(19,663)	(18,232)	(1,431)	(14,526)
Ratios:				
Loss ratio - Prior Accident Years	2.6%	(0.9%)	3.5%	(2.1%)
- Current Accident Year	107.6%	108.8%	(1.2%)	103.7%
<i>Total</i>	110.2%	107.9%	2.3%	101.6%
Underwriting & Admin Expense	46.2%	43.2%	3.0%	38.9%
Combined Operating Ratio	156.4%	151.1%	5.3%	140.5%

rounding differences may occur

*as posted to FA's website Nov. 5, 2019

This updated projection to the end of the year has deteriorated by \$1.4 million from the projection provided last month (see the second and third columns in the table). This update was mainly driven by the March 31, 2020, as summarized in the table below (see also the “Effect of Quarterly Valuation” on page 5).

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NS	unfav / (fav) projected for full year						year EP 16,786 (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		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	148	(5)	143	1,107	-	1,250	0.9%	-	0.9%	6.6%	-	7.4%
CAY	(1,228)	(62)	(1,290)	861	-	(429)	(7.3%)	(0.4%)	(7.7%)	5.1%	-	(2.6%)
Prem Def	(67)	(22)	(89)	704	-	615	(0.4%)	(0.1%)	(0.5%)	4.2%	-	3.7%
TOTAL	(1,147)	(89)	(1,236)	2,672	-	1,436	(6.8%)	(0.5%)	(7.4%)	15.9%	-	8.6%

Current Month Results

The Nova Scotia Risk Sharing Pool produced a -\$2.2 million Operating Result in the month of May 2020, a \$1.0 million improvement from the same month last year. This improvement is composed of a \$1.7 million favourable impact driven by the overall decrease in the combined ratio (from 237.0% to 176.4% applied to \$2.9 million in earned premium), offset by a \$0.7 million unfavourable impact associated with the \$0.5 million increase in earned premium (at a combined ratio of 237.0%), and the additional.

This month’s results moved the year-to-date combined operating ratio from 149.1% at the end of 4 months to 154.8% at the end of 5 months. The 5.7 percentage point increase is composed of an 8.9 percentage point increase in the Prior Accident Years loss ratio, offset by a 1.2 percentage point decrease in the Current Accident Year loss ratio, and a 2.0 percentage point decrease in the expense ratio.

Variations from Projections

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

NS RSP Summary of Actual vs Projected variances

May 2020	Actual	Projection	Difference	Difference %
Written Premium	2,367	3,821	(1,454)	(38.1%)
Earned Premium	2,859	2,985	(126)	(4.2%)
Reported Losses				
Paid Losses	1,390	1,407	(17)	(1.2%)
Paid Expenses	50	78	(28)	(35.9%)
Change in Outstanding Losses	237	172	65	37.8%
Total Reported Losses	1,677	1,657	20	1.2%
Change in IBNR Provision *	2,606	1,524	1,082	
Change in Premium Deficiency (DPAC) *	(57)	150	(207)	

(Amounts in \$000's)

rounding differences may occur

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 May 2020, total reported losses were consistent with last month's projection. However, the Current Accident Year had a \$0.4 million favourable variance in reported losses, while the Prior Accident Years had a \$0.4 million unfavourable variance. No single Accident Year had a reported loss variance in excess of \$1.0 million.

The variances for claims activity were beyond the set thresholds for some specific individual Accident Years for the month. Management investigated claims activity and is satisfied that the variances are appropriately accounted for in our current booking process. With respect to the Current Accident Year, we attribute the lower than projected reported losses to a reduction in written premium and physical damage claims experience in relation to the COVID-19 pandemic impact. All other variances were within the set thresholds for the month.

Effect of Quarterly Valuation

The May 2020 Nova Scotia Risk Sharing Pool Operational Report reflects the results of an updated valuation as at March 31, 2020, with the associated impacts in relation to the results for May 2020 summarized in the following table.

NS	unfav / (fav) for the month and ytd						mth EP 2,859 (actual)					
	IMPACT in \$000s from changes in:						IMPACT unfav / (fav) as % mth 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	148	(7)	141	1,250	-	1,391	5.2%	(0.2%)	4.9%	43.7%	-	48.7%
CAY	(491)	(35)	(526)	381	-	(145)	(17.2%)	(1.2%)	(18.4%)	13.3%	-	(5.1%)
Prem Def	(484)	(44)	(528)	489	-	(39)	(16.9%)	(1.5%)	(18.5%)	17.1%	-	(1.4%)
TOTAL	(827)	(86)	(913)	2,120	-	1,207	(28.9%)	(3.0%)	(31.9%)	74.2%	-	42.2%

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 preceding table on the left), offset by the impact due to an 102 basis point decrease in the selected discount rate (from 1.64% to 0.62% generating a \$2.1 million unfavourable impact – see column [4] in the preceding table on the left).

There was no change in the margin for adverse deviation in investment yield (25 basis points). As well, the margins for adverse deviation for claims development as selected at the coverage / accident year level were left unchanged with this valuation. Our usual practice is to review / update margins for investment yield and claims development at the June 30 valuations. As a result, column [5] in the left table above shows \$0 impact for margin changes with this valuation.

COVID-19 impact

The current valuation includes a nominal \$1.1M favourable AY2020 adjustment related to the COVID-19 pandemic impact. This adjustment reflects a 30% reduction in a priori loss ratios for short-tailed physical damage coverages over the mid-March to end-of-June period. Given the uncertainties associated with the current RSP reporting environment, this adjustment will be revisited with the 2020 Q2 valuation. Additional discussion can be found in the Nova Scotia RSP May 2020 Actuarial highlights.

Management has observed unfavourable total valuation impacts over the last 12 valuation

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implementations as shown in column [5] of the following table (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: 2020 Q1		unfavourable / (favourable) Valuation Implementation Impact (\$000s)					\$000s		
Valuation	period implemented	updated LRs & exp	APVs @ prior assumptions	updated dsc't rate	updated margins	Total Impact	Booked Policy Liabilities	Total Impact as % Book Liabs	Nominal Impact as % Book Liabs
		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
						= sum([1] to [4])		= [5] / [6]	= [1] / [6]
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%)
2019 Q1	May 2019	1,524	70	797	-	2,391	66,991	3.6%	2.3%
2019 Q2	Aug 2019	(835)	(32)	24	(71)	(914)	70,580	(1.3%)	(1.2%)
2019 Q3	Oct 2019	816	66	(84)	-	798	75,355	1.1%	1.1%
2019 Q4	Mar 2020	1,842	161	(323)	-	1,680	80,737	2.1%	2.3%
2020 Q1	May 2020	(827)	(86)	2,120	-	1,207	84,532	1.4%	(1.0%)
12-qtrs	-	322	112	1,196	(209)	1,421			
% of total		22.7%	7.9%	84.2%	(14.7%)	100.0%			
		7 unfavourable (nominal) valuations						4 impacts were outside of 2.5%	
Averages									
12-qtrs		27	9	100	(17)	118	64,338	0.2%	-
2017 Q2 to 2019 Q1		(84)	-	(68)	(17)	(169)	57,607	(0.3%)	(0.1%)
2019 Q2 to 2020 Q1		249	27	434	(18)	693	77,801	0.9%	0.3%

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 2/3^{rds} will be favourable (due to the skewness of the development). On these 3 measures:

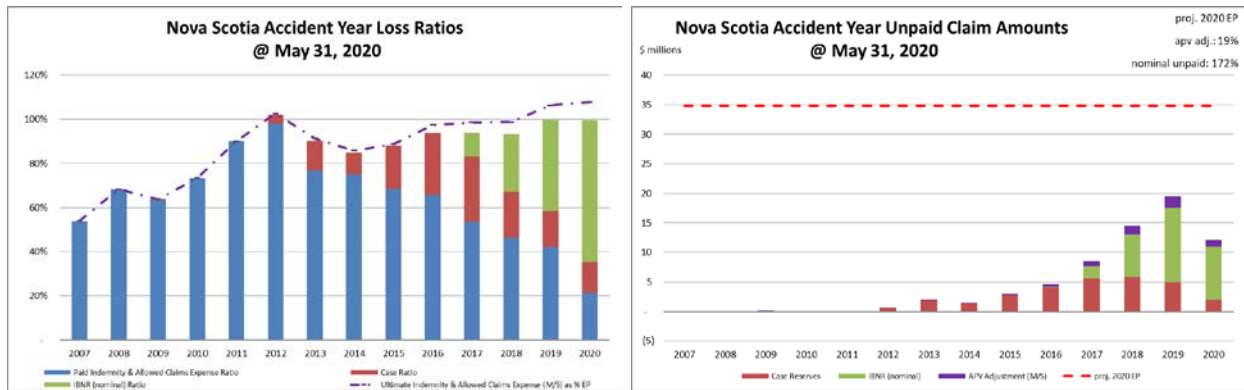
- (i) **Best estimate measurement:** This objective has been met, as the 12-quarter nominal change in column [1] is only \$0.3 million unfavourable.
- (ii) **Nominal size measurement:** This objective has not been met, with 4 individual valuations showing nominal changes in excess of 2.5% of ending policy liabilities per column [8] in the preceding table, being higher than our expectation (0).
- (iii) **Bias evidence measurement:** This objective has not been met, as 7 of 12 valuations show unfavourable changes (column [1] of the preceding table), higher than our expectation (3 to 5 of 12).

In summary, while challenging as a small RSP, we believe the nominal valuation impacts are

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.

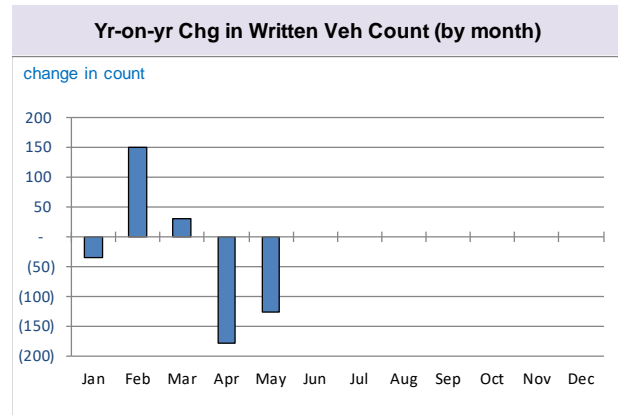
moving toward our target impacts (long term zero impact; individual valuation impact of no more than 2.5% of policy liabilities; no bias evident).

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

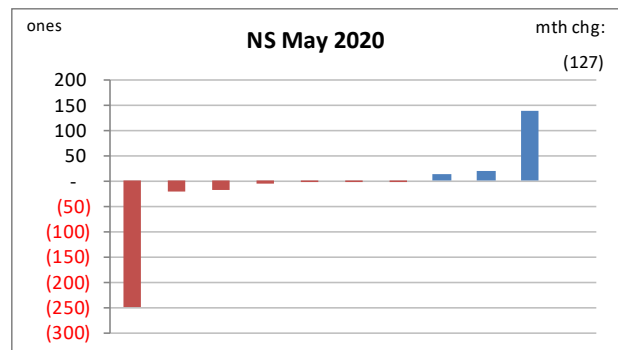


The actuarial valuation will be updated next as at June 30, 2020 and we anticipate that the results will be reflected in the August 2020 Operational Report.

Management Comments

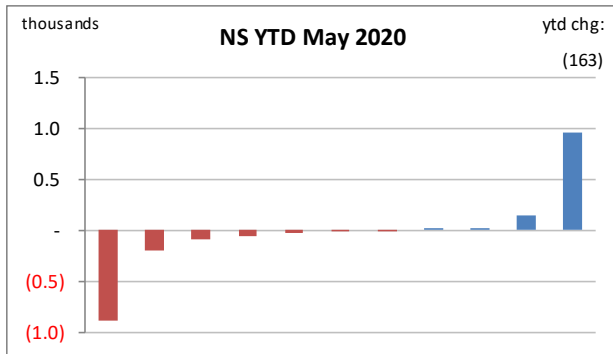


The chart on the left shows the year-on-year change in the vehicles transferred to the RSP by month, with May showing a decrease of 127 vehicles. Our projection last month (in part based on previous projections provided by select member company groups) was for an increase of 527 vehicles, indicating a variance of 654 from the actual transfers. This variance was mainly due to one member company group transferring a lower number of vehicles to the RSP in May than projected.



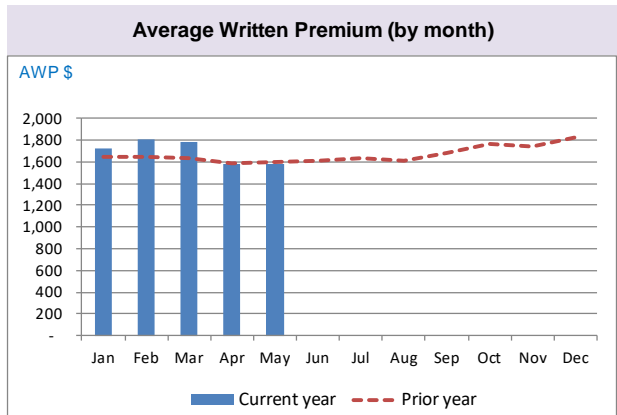
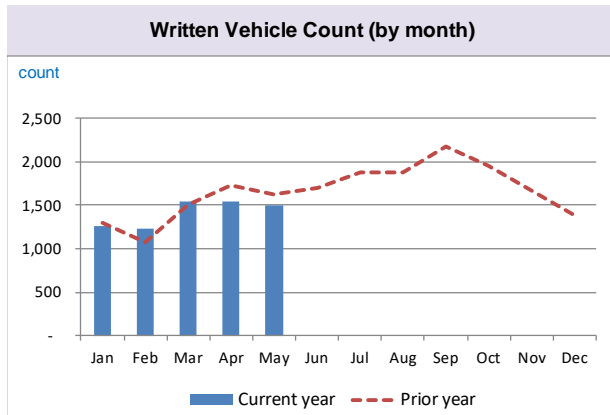
The chart on the left shows the overall change in the month, broken down by member company group changes (each blue or red bar represents the change for a single member company group), sorted by magnitude of change. Seven member company groups transferred fewer vehicles to the RSP this month compared with a year ago, while three transferred more. Of the 7 member company groups transferring fewer vehicles, 1 member company group accounted for 83% of the total transfer decrease for these “decliner” members.

Of the 3 member company groups transferring more vehicles, 1 member company group accounted for 81% of the total transfer increase for these “grower” members.



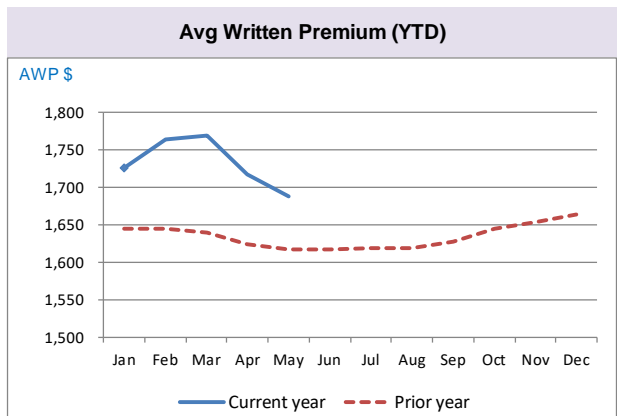
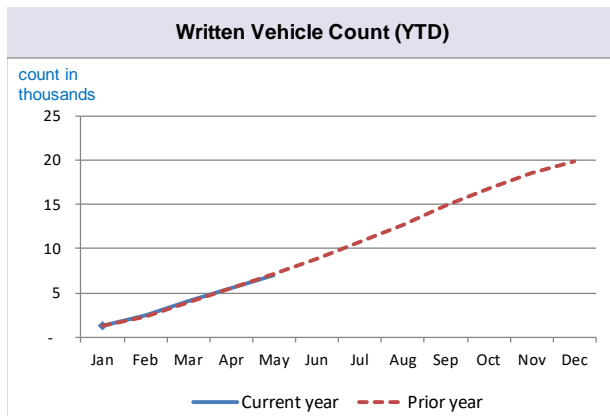
The chart on the left presents the same information as the previous chart, but on a **year-to-date** basis. That is, it shows the overall change in transfer counts year-to-date, broken down by member company group changes (each blue or red bar represents the change for a single member company group),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

May's vehicle count transfers to the RSP represent a 7.8% decrease from May 2019, and counts were down 2.3% year-to-date. Average written premium was down 1% in April 2020, but up 4.3% year-to date (see the following charts).



	May-20	May-19	Amt Chg	% Chg
W. Veh curr mth	1,498	1,625	(127)	-7.8%

	May-20	May-19	Amt Chg	% Chg
AWP curr mth	1,580	1,596	(16)	-1.0%



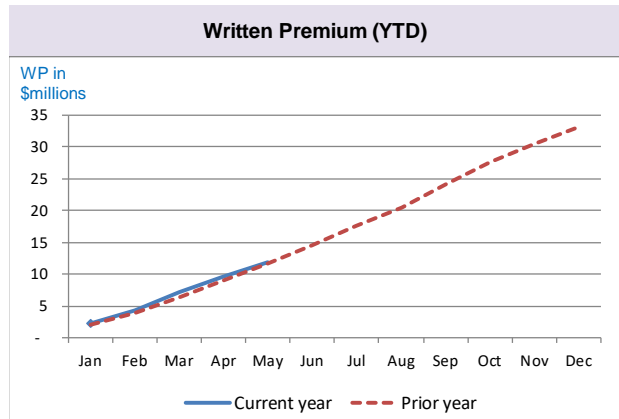
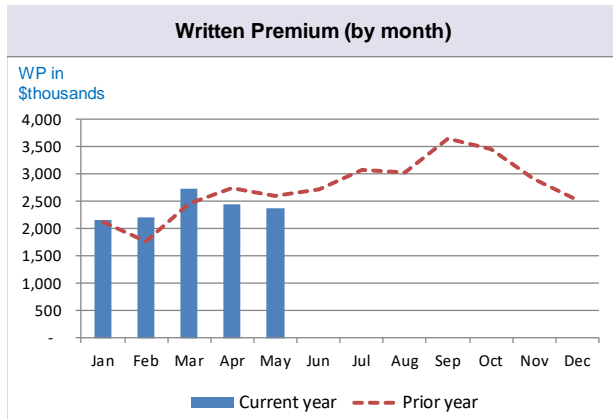
	May-20	May-19	Amt Chg	% Chg
W. Vehicles YTD	7,061	7,223	(163)	-2.3%

	May-20	May-19	Amt Chg	% Chg
Avg W. Prem YTD	1,688	1,618	70	4.3%

As a result of the movements in transfer vehicle counts and average written premium, the transferred premium was down 8.7% for the month compared with the 47.3% increase we projected last month, but was still up 2% year-to-date (see the following charts).

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	May-20	May-19	Amt Chg	% Chg
WP (\$000s) curr mth	2,367	2,593	(227)	-8.7%

	May-20	May-19	Amt Chg	% Chg
WP (\$000s) YTD	11,921	11,687	234	2.0%

Should you require any further information, please call Aidan Chen, AVP Data & Analytics at (416) 863-1750 x4804.

Saskia Matheson
President & CEO

Related links:

[Nova Scotia RSP May 2020 Operational Report – Actuarial Highlights](#)

*For additional details on Actual vs Projected variances, IBNR, and valuation (if applicable)

SUMMARY OF OPERATIONS - CALENDAR YEAR 2020

Risk Sharing Pool - Nova Scotia

EXHIBIT 1

Operating Results for the 5 Months Ended May 31, 2020 (Discounted basis)

Source: Monthly Operational Report

(thousands of dollars)

	January	February	March	April	May	CY2020 YTD	CY2020 12 MONTHS Updated Projection	CY2019 12 MONTHS Actual
Underwriting Revenue:								
Net Premiums Written	\$2,168	\$2,212	\$2,731	\$2,443	\$2,367	\$11,921	\$38,854	\$33,046
Decrease (Increase) in Unearned Premiums	657	464	(4)	320	492	1,929	(3,976)	(2,781)
Net Premiums Earned	\$2,825	\$2,676	\$2,727	\$2,763	\$2,859	\$13,850	\$34,878	\$30,265
Claims Incurred:								
Prior Accident Years:								
Undiscounted	(\$17)	(\$11)	\$567	(\$24)	\$139	\$654	\$654	\$107
Effect of Discounting	92	(50)	(292)	(38)	1,154	866	256	249
Discounted	\$75	(\$61)	\$275	(\$62)	\$1,293	\$1,520	\$910	\$356
Current Accident Year:								
Undiscounted	\$2,802	\$2,651	\$3,195	\$2,873	\$2,465	\$13,986	\$34,929	\$29,858
Effect of Discounting	200	176	94	154	525	1,149	2,594	1,505
Discounted	\$3,002	\$2,827	\$3,289	\$3,027	\$2,990	\$15,135	\$37,523	\$31,363
Claims Incurred	\$3,077	\$2,766	\$3,564	\$2,965	\$4,283	\$16,655	\$38,433	\$31,719
Underwriting Expenses:								
Expense Allowance	\$689	\$701	\$867	\$775	\$751	\$3,783	\$12,317	\$10,247
Change in UPDR/DPAC:								
Undiscounted	3	11	792	14	(473)	347	1,749	279
Effect of Discounting	(42)	(33)	(20)	(21)	416	300	967	504
Discounted	(39)	(22)	772	(7)	(57)	647	2,716	783
Underwriting Expenses	\$650	\$679	\$1,639	\$768	\$694	\$4,430	\$15,033	\$11,030
Net Underwriting Gain (Loss)	(\$902)	(\$769)	(\$2,476)	(\$970)	(\$2,118)	(\$7,235)	(\$18,588)	(\$12,484)
Administrative Expenses	\$60	\$85	\$61	\$70	\$67	\$343	\$1,075	\$753
Operating Result	(\$962)	(\$854)	(\$2,537)	(\$1,040)	(\$2,185)	(\$7,578)	(\$19,663)	(\$13,237)
Ratios:								
Claims & Expenses Incurred (Earned)								
Prior Accident Years	2.7%	-2.3%	10.1%	-2.2%	45.2%	11.0%	2.6%	1.2%
Current Accident Year	106.3%	105.6%	120.6%	109.6%	104.6%	109.3%	107.6%	103.6%
All Accident Years Combined	109.0%	103.3%	130.7%	107.4%	149.8%	120.3%	110.2%	104.8%
Underwriting & Administrative Expenses (Earned)	25.1%	28.6%	62.3%	30.3%	26.6%	34.5%	46.2%	38.9%
Combined Operating Ratio	134.1%	131.9%	193.0%	137.7%	176.4%	154.8%	156.4%	143.7%

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