

TO: MEMBERS OF THE FACILITY ASSOCIATION

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

BULLETIN NO.: F17– 077

DATE: SEPTEMBER 29, 2017

**SUBJECT: NOVA SCOTIA RISK SHARING POOL
– AUGUST 2017 OPERATIONAL REPORT**

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

Please be advised that the August 2017 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 June 30, 2017 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 **\$4.2 million favourable** impact on the month’s net result from operations, subtracting an estimated 37.5 points from the year-to-date Combined Operating Ratio (ending at 97.5%). The impact is summarized in the tables at the top of the next page¹.

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 F17-077
Nova Scotia Risk Sharing Pool – August 2017 Operational Report

NS	unfav / (fav) for the month and ytd						ytd EP 11,098 (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	(2,149)	(234)	(2,383)	(148)	(87)	(2,618)	(19.4%)	(2.1%)	(21.5%)	(1.3%)	(0.8%)	(23.6%)
CAY	(597)	(61)	(658)	(60)	-	(718)	(5.4%)	(0.5%)	(5.9%)	(0.5%)	-	(6.5%)
Prem Def	(683)	(68)	(751)	(78)	-	(829)	(6.2%)	(0.6%)	(6.8%)	(0.7%)	-	(7.5%)
TOTAL	(3,429)	(363)	(3,792)	(286)	(87)	(4,165)	(30.9%)	(3.3%)	(34.2%)	(2.6%)	(0.8%)	(37.5%)

The valuation result is due to changes generated from updated nominal ultimate selections and projected cash flows (generating a \$3.8 million favourable impact – see column [3] in the left table above), augmented by the impact of a 24 basis point increase in the selected discount rate (from 0.93% to 1.17%, generating a \$0.3 million favourable impact – see column [4] in the left table above). Further, while there was no change in the margin for adverse deviation in investment yield (remains at 25 basis points), the margins for adverse deviation for claims development as selected at the coverage / accident year level were updated with this valuation (generating a \$0.1 million favourable impact – see column [5] in the left table above).

Management has observed favourable *total* valuation impacts over the last 8 valuation implementations, with 4 of 8 valuation implementations being unfavourable over that period, as shown in the table below (summarizing the same information as provided in the left table above as relates to the most recent 8 valuation implementations). It should be noted that the impacts in column [4] are largely outside of the control of FA (as being related to macroeconomic factors).

RSP: Nova Scotia, as at: 2017 Q2		unfavourable / (favourable) Valuation Implementation Impact (\$000s)					\$000s	
Valuation	updated LRs & exp	updated LRs & exp	APVs @ prior assumptions	updated dsct rate	updated margins	Total Impact	Booked Policy Liabilities	Total Impact as % Book Liabs
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
						=sum([1] to [6])		=[6] / [7]
2015 Q3	Oct	(117)	12	216	-	111	39,941	0.3%
2015 Q4	Mar	(772)	(56)	48	-	(780)	39,517	(2.0%)
2016 Q1	May	294	94	33	-	421	41,963	1.0%
2016 Q2	Aug	(92)	(43)	67	(918)	(986)	43,376	(2.3%)
2016 Q3	Oct	836	88	62	-	986	45,643	2.2%
2016 Q4	Mar	(1,416)	(140)	(535)	-	(2,091)	43,088	(4.9%)
2017 Q1	May	103	10	92	-	205	45,635	0.4%
2017 Q2	Aug	(3,429)	(363)	(286)	(87)	(4,165)	47,893	(8.7%)
8-qtrs	-	(4,593)	(398)	(303)	(1,005)	(6,299)		
% of total		72.9%	6.3%	4.8%	16.0%	100.0%		
Averages								
8-qtrs		(574)	(50)	(38)	(126)	(787)	43,382	(1.8%)
2015 Q3 to 2016 Q2		(172)	2	91	(230)	(309)	41,199	(0.8%)
2016 Q3 to 2017 Q2		(977)	(101)	(167)	(22)	(1,266)	45,565	(2.8%)

The FA valuation approach is focused on providing best estimates on a nominal basis, and we expect this to manifest itself as a close-to-zero 8-quarter impact for column [2] in the table

above. This objective has not been met, and it is somewhat discouraging to see the most recent 4 valuations having a worse result than the earlier 4-quarter period.

Please see “Effect of Quarterly Valuation” on page 5 for additional detail.

Summary of Financial Results

The calendar year-to-date Operating Result is \$0.3 million and the incurred loss ratio to the end of 8 months is 54.6%, as summarized in the table below.

Amounts in \$000s	August 2017	August 2016	Year to date Aug 2017	Year to Date Aug 2016
Premium Written	3,005	1,662	15,859	10,845
Premium Earned	1,676	1,280	11,098	9,754
Incurred Losses	(1,632)	131	6,054	8,866
Underwriting & Admin Expense	259	708	4,760	3,798
Operating Result	3,049	441	284	(2,910)
<i>Ratios:</i>				
Loss ratio - Prior Accident Years	(159.4%)	(78.8%)	(44.8%)	(13.2%)
- Current Accident Year	62.1%	89.0%	99.4%	104.1%
<i>Total</i>	(97.3%)	10.2%	54.6%	90.9%
<i>Underwriting & Admin Expense</i>	15.5%	55.3%	42.9%	38.9%
<i>Combined Operating Ratio</i>	(81.8%)	65.5%	97.5%	129.8%

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 2017” attached to this bulletin.

Updated Projection to Year-end 2017

The projected calendar year Operating Result to December 2017 is -\$3.7 million and the estimated combined operating ratio to December 2017 is 119.4%, as summarized in the table at the top of the next page.

NS RSP Yr-end Projection Amounts in \$000s	Current (Aug 2017)	Prior Mth (Jul 2017)	Change	Final 2017 Outlook*
Premium Written	28,378	28,172	206	15,943
Premium Earned	18,850	19,429	(579)	15,564
Incurred Losses	13,328	17,765	(4,437)	15,512
Underwriting & Admin Expense	9,176	10,261	(1,085)	5,752
Net Result from Operations	(3,654)	(8,597)	4,943	(5,700)
Ratios:				
Loss ratio - Prior Accident Years	(27.6%)	(13.4%)	(14.2%)	(5.1%)
- Current Accident Year	98.3%	104.9%	(6.6%)	104.8%
<i>Total</i>	70.7%	91.5%	(20.8%)	99.7%
Underwriting & Admin Expense	48.7%	52.8%	(4.1%)	37.0%
Combined Operating Ratio	119.4%	144.3%	(24.9%)	136.7%

rounding differences may occur

as posted to FA's website Sep. 28, 2016

This updated projection to the end of the year has improved by \$4.9 million from the projection provided last month (see table above), mainly due to the overall favourable impact of the June 30, 2017 valuation, as summarized in the table below (see also the “Effect of Quarterly Valuation” on page 5). Remaining differences were driven by changes in projected premium volumes, and the associated impacts on claims and expense projections. Variances in written/earned premium and prior accident year and current & future accident year loss ratio changes impacts (driven by valuation results) are the main drivers of variances from the Final 2017 Outlook based on August 2016 Operational Report .

NS	unfav / (fav) projected for full year						year EP 10,781 (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	(2,149)	(217)	(2,366)	(131)	(85)	(2,582)	(19.9%)	(2.0%)	(21.9%)	(1.2%)	(0.8%)	(23.9%)
CAY	(1,007)	(100)	(1,107)	(92)	-	(1,199)	(9.3%)	(0.9%)	(10.3%)	(0.9%)	-	(11.1%)
Prem Def	(957)	(98)	(1,055)	(107)	-	(1,162)	(8.9%)	(0.9%)	(9.8%)	(1.0%)	-	(10.8%)
TOTAL	(4,113)	(415)	(4,528)	(330)	(85)	(4,943)	(38.2%)	(3.8%)	(42.0%)	(3.1%)	(0.8%)	(45.8%)

Current Month Results

The Nova Scotia Risk Sharing Pool produced a \$3.0 million Operating Result in the month of August 2017, a \$2.6 million improvement from the same month last year. This improvement is composed of an estimated \$0.1 million favourable impact associated with the \$0.4 million increase in earned premium (at a combined ratio of 65.5%), with the remaining \$2.5 million improvement stemming from the overall decrease in the combined ratio (from 65.5% to -81.8% applied to \$1.7 million in earned premium). 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 129.4% at the end of

7 months to 97.5% at the end of 8 months. The 31.9 percentage point decrease is composed of a 20.4 percentage point decrease in the Prior Accident Year loss ratio, coupled with a 6.6 percentage point decrease in the Current Accident Year loss ratio, and a 4.9 percentage point decrease in the expense ratio.

Variances from Projections

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

August 2017	Actual	Projection	Difference	Difference %
Written Premium	3,005	3,812	(807)	(21.2%)
Earned Premium	1,676	1,784	(108)	(6.1%)
Reported Losses				
Paid Losses	817	1,062	(245)	(23.1%)
Paid Expenses	40	50	(10)	(20.0%)
Change in Outstanding Losses	751	5	746	>999.9%
Total Reported Losses	1,608	1,117	491	44.0%
Change in IBNR Provision *	(3,240)	676	(3,916)	
Change in Premium Deficiency (DPAC) *	(722)	164	(886)	

(Amounts in \$000's)

rounding differences may occur

*Detailed information is included at [Nova Scotia RSP August 2017 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.

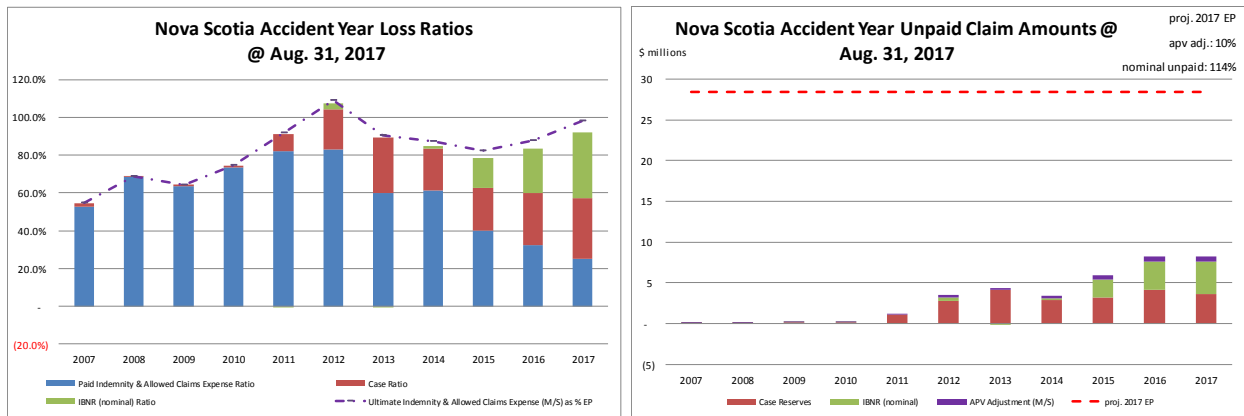
For the month of August 2017, reported losses were \$0.5 million higher than projected. The Current Accident Year had a \$0.5 million unfavourable variance in reported losses, and the Prior Accident Years had a \$18 thousand unfavourable variance. No single Prior Accident Year had a reported loss variance in excess of \$1.0 million.

Effect of Quarterly Valuation

The August 2017 Nova Scotia Risk Sharing Pool Operational Report reflects the results of an updated valuation as at June 30, 2017, with the associated impacts in relation to the results for August 2017 summarized in the table at the top of the next page.

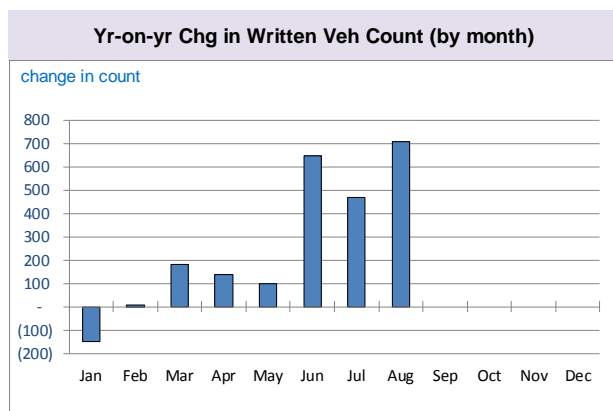
NS	unfav / (fav) for the month and ytd						mth EP 1,676 (actual)					
	IMPACT in \$000s from changes in:						IMPACT unfav / (fav) as % mth EP from changes in:					
	ults & payout patterns			dsct rate	margins		ults & payout patterns			dsct rate	margins	
	Nominal	apv adj.	sub-tot	apv adj.	apv adj.	TOTAL	Nominal	apv adj.	sub-tot	apv adj.	apv adj.	TOTAL
	[1]	[2]	[3]	[4]	[5]	[6]	[1]	[2]	[3]	[4]	[5]	[6]
PAYs	(2,149)	(234)	(2,383)	(148)	(87)	(2,618)	(128.2%)	(14.0%)	(142.2%)	(8.8%)	(5.2%)	(156.2%)
CAY	(597)	(61)	(658)	(60)	-	(718)	(35.6%)	(3.6%)	(39.3%)	(3.6%)	-	(42.8%)
Prem Def	(683)	(68)	(751)	(78)	-	(829)	(40.8%)	(4.1%)	(44.8%)	(4.7%)	-	(49.5%)
TOTAL	(3,429)	(363)	(3,792)	(286)	(87)	(4,165)	(204.6%)	(21.7%)	(226.3%)	(17.1%)	(5.2%)	(248.5%)

The charts 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.

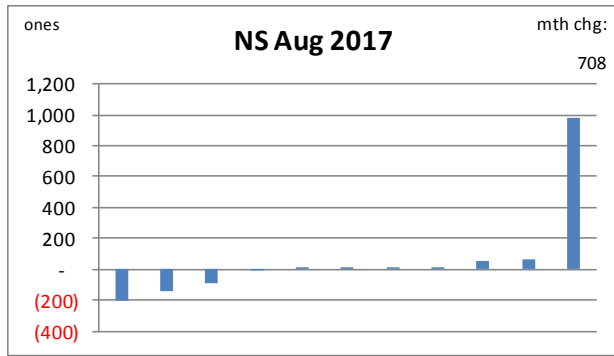


The preceding charts, latest valuation results, and related actuarial present value assumption updates are discussed in more detail in the [Nova Scotia RSP August 2017 Operational Report – Actuarial Highlights](#) and in the [Actuarial Quarterly Valuation Highlights Risk Sharing Pools as at June 30, 2017](#). The actuarial valuation will be updated next as at September 30, 2017 and we anticipate the results will be reflected in the October 2017 Operational Report.

Management Comments

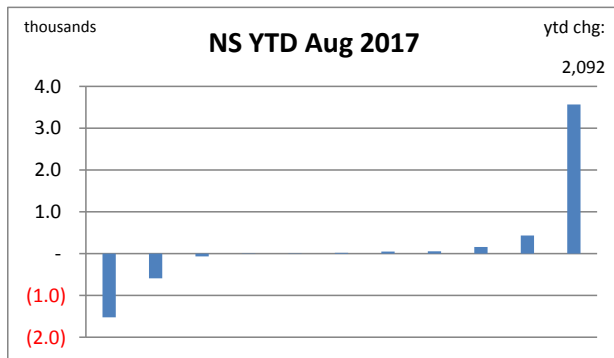


The chart on the left shows the year-on-year change in the vehicles transferred to the pool by month, with August showing an increase of 708 vehicles. Our projection last month (in part based on previous projections provided by select member company groups) was for an increase of 1,265 vehicles, indicating a variance of 557 from the actual transfers. This variance was mainly due to one member company groups transferring a lower number of vehicles to the pool in August than projected.



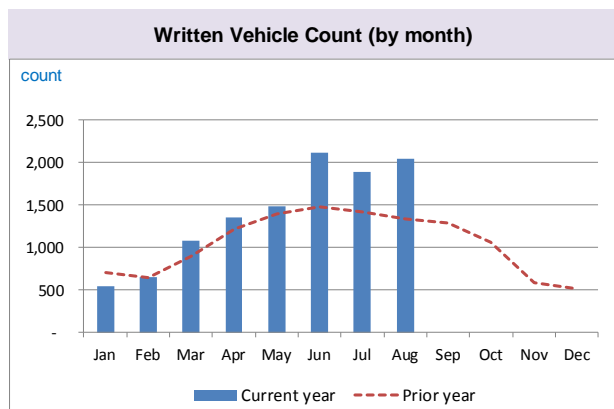
The chart on the left shows the overall change in the **month**, broken down by member company group changes (each blue bar represents the change for a single member company group), sorted by magnitude of change. Four member company groups transferred fewer vehicles to the pool this month compared with a year ago, while seven transferred more. Of the 4 member company groups transferring fewer vehicles, 2 member company groups accounted for 78% of the total transfer decrease for these “decliner” members.

Of the 7 member company groups transferring more vehicles, 1 member company group accounted for 86% of the total transfer increase for these “grower” members.

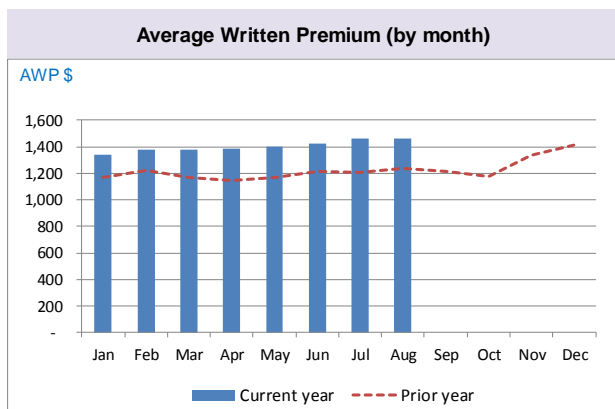


The chart on the left presents the same information as the previous chart, but on a **year-to-date** basis. That is, it shows the overall change in transfer counts year-to-date, broken down by member company group changes (each blue bar represents the change for a single member company group), sorted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

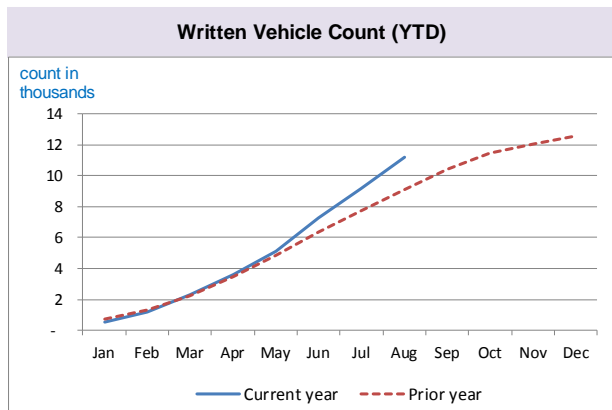
August’s vehicle count transfers to the pool represent a 52.7% increase from August 2016, and vehicle counts were up 23.0% year-to-date. Average written premium was up 18.5% in August 2017, and was up 18.9% year-to-date (see charts immediately below and at the top of the next page).



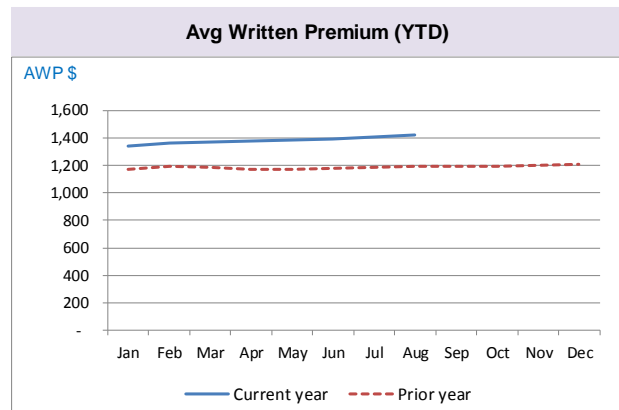
	Aug-17	Aug-16	Amt Chg	% Chg
W. Veh curr mth	2,050	1,343	708	52.7%



	Aug-17	Aug-16	Amt Chg	% Chg
AWP curr mth	1,466	1,237	229	18.5%

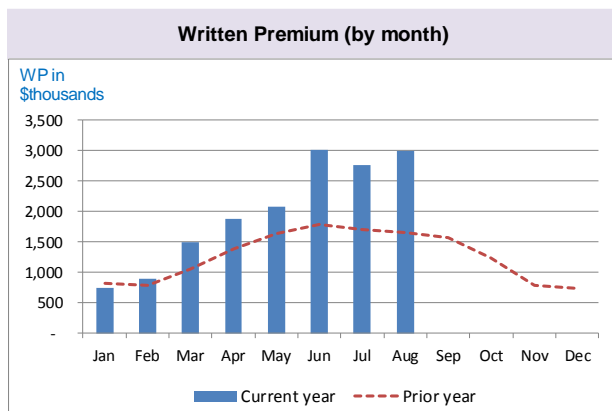


	Aug-17	Aug-16	Amt Chg	% Chg
W. Vehicles YTD	11,184	9,092	2,092	23.0%

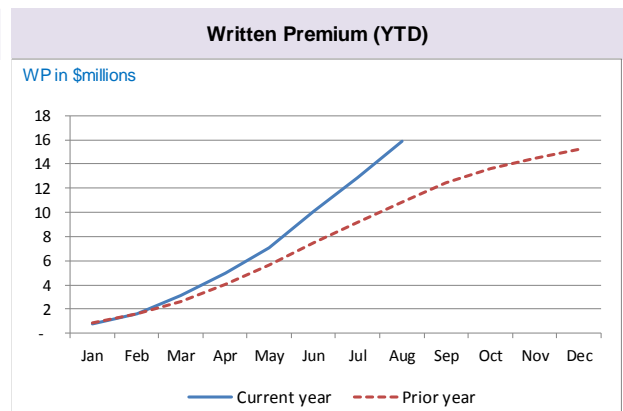


	Aug-17	Aug-16	Amt Chg	% Chg
Avg W. Prem YTD	1,418	1,193	225	18.9%

As a result of the movements in transfer vehicle counts and average written premium, the transferred premium was up 80.9% for the month compared with the 129.4% increase we projected last month (based in particular on a significant increase in transfers projected by one member), and was up 46.2% year-to-date (see charts immediately below).



	Aug-17	Aug-16	Amt Chg	% Chg
WP (\$000s) curr mth	3,005	1,662	1,344	80.9%



	Aug-17	Aug-16	Amt Chg	% Chg
WP (\$000s) YTD	15,859	10,845	5,014	46.2%

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

David J. Simpson, M.B.A., FCIP, C. Dir.
President & CEO

Related links:

[Nova Scotia RSP August 2017 Operational Report – Actuarial Highlights](#)

[Actuarial Quarterly Valuation Highlights Risk Sharing Pools as at June 30, 2017](#)

[Actuarial Quarterly Valuation Highlights Exhibits – Nova Scotia RSP](#)

SUMMARY OF OPERATIONS - CALENDAR YEAR 2017

Risk Sharing Pool - Nova Scotia

Operating Results for the 8 Months Ended August 31, 2017 (Discounted basis)

Source: Monthly Operational Report

(thousands of dollars)

EXHIBIT 1

	January	February	March	April	May	June	July	August	CY2017 YTD	CY2017 12 MONTHS Updated Projection	CY2016 12 MONTHS Actual
Underwriting Revenue:											
Net Premiums Written	\$739	\$895	\$1,493	\$1,876	\$2,082	\$3,012	\$2,757	\$3,005	\$15,859	\$28,378	\$15,184
Decrease (Increase) in Unearned Premiums	529	241	(193)	(566)	(684)	(1,570)	(1,189)	(1,329)	(4,761)	(9,528)	(383)
Net Premiums Earned	\$1,268	\$1,136	\$1,300	\$1,310	\$1,398	\$1,442	\$1,568	\$1,676	\$11,098	\$18,850	\$14,801
Claims Incurred:											
Prior Accident Years:											
Undiscounted	(\$35)	(\$36)	(\$1,321)	(\$9)	(\$27)	(\$8)	(\$17)	(\$2,163)	(\$3,616)	(\$3,616)	\$441
Effect of Discounting	(88)	(47)	(566)	(42)	12	(64)	(52)	(509)	(1,356)	(1,586)	(1,075)
Discounted	(\$123)	(\$83)	(\$1,887)	(\$51)	(\$15)	(\$72)	(\$69)	(\$2,672)	(\$4,972)	(\$5,202)	(\$634)
Current Accident Year:											
Undiscounted	\$1,272	\$1,146	\$1,252	\$1,274	\$1,418	\$1,412	\$1,546	\$1,051	\$10,371	\$17,513	\$14,225
Effect of Discounting	117	93	52	77	113	104	110	(11)	655	1,017	1,155
Discounted	\$1,389	\$1,239	\$1,304	\$1,351	\$1,531	\$1,516	\$1,656	\$1,040	\$11,026	\$18,530	\$15,380
Claims Incurred	\$1,266	\$1,156	(\$583)	\$1,300	\$1,516	\$1,444	\$1,587	(\$1,632)	\$6,054	\$13,328	\$14,746
Underwriting Expenses:											
Expense Allowance	\$225	\$274	\$461	\$581	\$645	\$933	\$853	\$931	\$4,903	\$8,783	\$5,288
Change in UPDR/DPAC:											
Undiscounted	5	5	(73)	(2)	60	(7)	(3)	(685)	(700)	(963)	(184)
Effect of Discounting	(50)	(22)	(99)	48	77	131	100	(37)	148	491	(22)
Discounted	(\$45)	(\$17)	(\$172)	\$46	\$137	\$124	\$97	(\$722)	(552)	(\$472)	(\$206)
Underwriting Expenses	\$180	\$257	\$289	\$627	\$782	\$1,057	\$950	\$209	\$4,351	\$8,311	\$5,082
Net Underwriting Gain (Loss)	(\$178)	(\$277)	\$1,594	(\$617)	(\$900)	(\$1,059)	(\$969)	\$3,099	\$693	(\$2,789)	(\$5,027)
Administrative Expenses	\$46	\$61	\$45	\$51	\$62	\$48	\$46	\$50	\$409	\$865	\$474
Operating Result	(\$224)	(\$338)	\$1,549	(\$668)	(\$962)	(\$1,107)	(\$1,015)	\$3,049	\$284	(\$3,654)	(\$5,501)
Ratios:											
Claims & Expenses Incurred (Earned)											
Prior Accident Years	-9.7%	-7.3%	-145.2%	-3.9%	-1.1%	-5.0%	-4.4%	-159.4%	-44.8%	-27.6%	-4.3%
Current Accident Year	109.5%	109.1%	100.3%	103.1%	109.5%	105.1%	105.6%	62.1%	99.4%	98.3%	103.9%
All Accident Years Combined	99.8%	101.8%	-44.9%	99.2%	108.4%	100.1%	101.2%	-97.3%	54.6%	70.7%	99.6%
Underwriting & Administrative Expenses (Earned)	17.8%	28.0%	25.7%	51.8%	60.4%	76.6%	63.5%	15.5%	42.9%	48.7%	37.5%
Combined Operating Ratio	117.6%	129.8%	-19.2%	151.0%	168.8%	176.7%	164.7%	-81.8%	97.5%	119.4%	137.1%

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