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TO: MEMBERS OF THE FACILITY ASSOCIATION

**ATTENTION:** CHIEF EXECUTIVE OFFICER

NOVA SCOTIA RISK SHARING POOL PROJECT MANAGER

**BULLETIN NO.: F19 – 093** 

DATE: **NOVEMBER 28, 2019** 

**SUBJECT:** NOVA SCOTIA RISK SHARING POOL

- OCTOBER 2019 OPERATIONAL REPORT

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

Please be advised that the October 2019 Nova Scotia Risk Sharing Pool Operational Report was available on the Facility Association (FA) Portal at https://portal.facilityassociation.com on November 21, 2019.

## **Key Points**

- (a) The 2019 year-to-date net operating deficit is \$11.3 million with the addition of \$2.0 million in deficit generated in October, resulting in a year-to-date COR of 145.3% on earned premium of \$24.8 million;
- (b) this month's results include the implementation of the 2019 Q3 valuation, resulting in an estimated \$0.8 million unfavourable impact; and
- (c) the projected 2019 year-end net operating deficit is \$12.9 million, with a COR at 142.9% on earned premium of \$30.2 million (our Outlook for 2019 was \$10.9 million of net operating deficit with a COR of 136.0% on earned premium of \$30.3 million).

## **New This Month**

## Valuation

A valuation of the Nova Scotia Risk Sharing Pool ("RSP") as at September 30, 2019 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 \$0.8 million <u>unfavourable</u> impact on the month's net result from operations, adding an estimated 3.2 points to the year-to-date Combined Operating Ratio (ending at 145.3%). The impact is summarized in the

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NS		unfav ,	/ (fav) for t	he month a	nd ytd		ytd EP	24,814	(actual)			
		IMPA	CT in \$000s	from chang	ges in:	IMPACT unfav / (fav) as % ytd EP from changes in:						
	ults &	payout pat	tterns	dsct rate	margins		ults 8	payout pat	tterns	dsct rate	margins	
·	Nominal	nal apv adj. sub-tot apv adj. apv adj. TOTAL		TOTAL	Nominal	apv adj.	sub-tot	apv adj.	apv adj.	TOTAL		
	[1]	[2]	[3]	[4]	[5]	[6]	[1]	[2]	[3]	[4]	[5]	[6]
PAYs	514	54	568	(43)	-	525	2.1%	0.2%	2.3%	(0.2%)	-	2.1%
CAY	251	20	271	(21)	-	250	1.0%	0.1%	1.1%	(0.1%)	-	1.0%
Prem Def	51	(8)	43	(20)	-	23	0.2%	-	0.2%	(0.1%)	-	0.1%
TOTAL	816	66	882	(84)	-	798	3.3%	0.3%	3.6%	(0.3%)	-	3.2%

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 -\$11.3 million and the incurred loss ratio to the end of 10 months is 105.6%, as summarized in the table below.

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

	October	October	Year to date	Year to Date
Amounts in \$000s	2019	2018	Oct 2019	Oct 2018
Premium Written	3,451	2,834	27,609	24,884
Premium Earned	2,670	2,427	24,814	22,827
Incurred Losses	3,411	2,863	26,220	21,668
Underwriting & Admin Expense	1,236	802	9,844	8,331
Operating Result	(1,977)	(1,238)	(11,250)	(7,172)
Ratios:				
Loss ratio - Prior Accident Years	17.2%	35.1%	1.8%	(1.7%)
- Current Accident Year	110.6%	82.8%	103.8%	96.6%
Total	127.8%	117.9%	105.6%	94.9%
Underwriting & Admin Expense	46.3%	33.0%	39.7%	36.5%
Combined Operating Ratio	174.1%	150.9%	145.3%	131.4%

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 -\$12.9 million and the estimated combined operating ratio to December 2019 is 142.9%, as summarized in the table at

<sup>&</sup>lt;sup>1</sup>In 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".

the top of the next page.

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

NS RSP 2019 Yr-end Projection	Current	Prior Mth		Final 2019
Amounts in \$000s	(Oct 2019)	(Sep 2019)	Change	Outlook*
Premium Written	32,499	31,970	529	31,089
Premium Earned	30,237	30,109	128	30,272
Incurred Losses	31,576	30,727	849	30,014
Underwriting & Admin Expense	11,606	11,483	123	11,148
Net Result from Operations	(12,945)	(12,101)	(844)	(10,890)
Ratios:				
Loss ratio - Prior Accident Years	1.0%	(0.6%)	1.6%	(1.5%)
- Current Accident Year	103.5%	102.7%	0.8%	100.7%
Total	104.5%	102.1%	2.4%	99.2%
Underwriting & Admin Expense	38.4%	38.1%	0.3%	36.8%
Combined Operating Ratio	142.9%	140.2%	2.7%	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 deteriorated by \$0.8 million from the projection provided last month (see the second and third columns in the table). The update includes the overall \$0.8 million unfavourable impact of the September 30, 2019 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 ,	/ <mark>(fav)</mark> proje	ected for fu	II year		year EP	15,961	(projecte	d this mont	h)	
		IMPA	CT in \$000s	from chang	es in:	IMPACT unfav / (fav) as % full year EP from changes in:						
	ults &	payout pat	terns	dsct rate	margins		ults 8	payout pat	terns	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	514	48	562	(39)	-	523	3.2%	0.3%	3.5%	(0.2%)	-	3.3%
CAY	305	15	320	(23)	-	297	1.9%	0.1%	2.0%	(0.1%)	-	1.9%
Prem Def		(11)	(11)	(20)	-	(31)		(0.1%)	(0.1%)	(0.1%)	-	(0.2%)
TOTAL	819	52	871	(82)	-	789	5.1%	0.3%	5.5%	(0.5%)	-	4.9%

#### Current Month Results

The Nova Scotia Risk Sharing Pool produced a -\$2.0 million Operating Result in the month of October 2019, a \$0.7 million deterioration from the same month last year. This deterioration is composed of a \$0.1 million unfavourable impact associated with the \$0.2 million increase in earned premium (at a combined ratio of 150.9%), with the remaining \$0.6 million stemming from the overall increase in the combined ratio (from 150.9% to 174.1% applied to \$2.7 million in earned premium).

This month's results moved the year-to-date combined operating ratio from 141.9% at the end of 9 months to 145.3% at the end of 10 months. The 3.4 percentage point increase is composed of a

1.8 percentage point increase in the Prior Accident Years loss ratio, coupled with a 0.8 percentage point increase in the Current Accident Year loss ratio, and a 0.8 percentage point increase 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.

NS RSP Summary of Actual vs Projected variances

October 2019	Actual	Projection	Diffe rence	Difference %
Written Premium	3,451	2,922	529	18.1%
Earned Premium	2,670	2,721	(51)	(1.9%)
Reported Losses				
Paid Losses	1,814	1,451	363	25.0%
Paid Expenses	69	75	(6)	(8.0%)
Change in Outstanding Losses	116	(6)	122	<-999.9%
Total Reported Losses	1,999	1,520	479	31.5%
Change in IBNR Provision *	1,412	1,197	215	
Change in Premium Deficiency (DPAC) *	106	81	25	

(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 October 2019, reported losses were \$0.5 million higher than projected. The Current Accident Year had a \$0.1 million <u>unfavourable</u> variance in reported losses, and the Prior Accident Years had a \$0.4 million <u>unfavourable</u> variance. No single Prior 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 Prior Accident Years for the month. Management investigated claims activity and is satisfied that the variances are appropriately accounted for in our current booking process. All other variances were within the set thresholds for the month.

#### **Effect of Quarterly Valuation**

The October 2019 Nova Scotia Risk Sharing Pool Operational Report reflects the results of an updated valuation as at September 30, 2019, with the associated impacts in relation to the results for October 2019 summarized in the table at the top of the next page.

<sup>\*</sup>Detailed information is included at Nova Scotia RSP October 2019 Operational Report - Actuarial Highlights.

NS		unfav	/ <mark>(fav)</mark> for t	he month a	nd ytd		mth EP	2,670	(actual)			
		IMPA	CT in \$000s	from chang	ges in:	IMPACT unfav / (fav) as % mth EP from changes in:						
	ults &	payout pat	tterns	dsct rate	margins		ults 8	payout pat	tterns	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	514	54	568	(43)	-	525	19.3%	2.0%	21.3%	(1.6%)	-	19.7%
CAY	251	20	271	(21)	-	250	9.4%	0.7%	10.1%	(0.8%)	-	9.4%
Prem Def	51	(8)	43	(20)	-	23	1.9%	(0.3%)	1.6%	(0.7%)	-	0.9%
TOTAL	816	66	882	(84)	-	798	30.6%	2.5%	33.0%	(3.1%)	-	29.9%

The valuation result is due to changes generated from updated nominal ultimate selections and projected cash flows (generating a \$0.9 million <u>unfavourable</u> impact – see column [3] in the left table above). This was partially offset by the impact due to a 5 basis point <u>increase</u> in the selected discount rate (from 1.41% to 1.46% generating an \$84 thousand favourable impact – see column [4] in the left table above).

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 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.

Management has observed favourable *total* valuation impacts over the last 12 valuation implementations as shown in column [5] of the table 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).

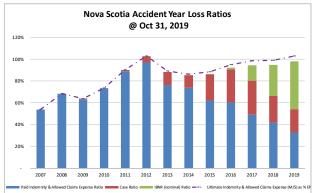
RSP: Nova Sco	tia,								
as at: 2019 Q3		_		Valuation Impler		act (\$000s)	\$000s		
Valuation	period implemented	updated LRs & exp	APVs @ prior assumptions	updated dsct rate	updated margins	Total Impact	Booked Policy Liabilities	Total Impact as % Book Liabs	Nominal Impact as % Book Liabs
	Implemented	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
		.,			.,	= sum([1] to [4])	1-7	= [5] / [6]	= [1] / [6]
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%)
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%
12-qtrs	-	(2,006)	(93)	(1,044)	(209)	(3,352)			
% of total		59.8%	2.8%	31.1%	6.2%	100.0%			
		7 un	favourable (nom	inal) valuations				5 impacts were	e outside of 2.5%
Averages									
12-qtrs		(167)	(8)	(87)	(17)	(279)	57,959	(0.5%)	(0.3%)
2016 Q4 to 2018 Q3		(330)	(24)	(286)	(17)	(658)	52,471	(1.3%)	(0.6%)
2018 Q4 to 2019 Q3		159	26	310	(18)	477	68,937	0.7%	0.2%

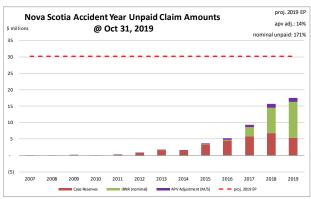
The FA valuation approach is focused on providing (i) best estimates on a nominal basis (i.e. the longer term average of nominal changes in column [1] should be close-to-zero); (ii) the nominal changes of any one valuation in relation to policy liabilities<sup>2</sup>, should be "small" (less than 2.5%);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

- (i) **Best estimate measurement: This objective has <u>not</u> been met**, as the 12-quarter nominal change in column [1] is \$2.0 million favourable. That said, the <u>average</u> favourable impact over the 12 quarters at \$0.2 million (nominal only) represents 0.3% of ending policy liabilities per column [8] which we do not view as significant. We also 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 <u>not</u> been met, with 5 individual valuations showing nominal changes in excess of 2.5% of ending policy liabilities per column [8] in the table above, being higher than our expectation (0).
- (iii) **Bias evidence measurement**: **This objective has <u>not</u> been met**, as 7 of 12 valuations show <u>unfavourable changes</u> (column [1] of the table above), higher than our expectation (3 to 5 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 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.

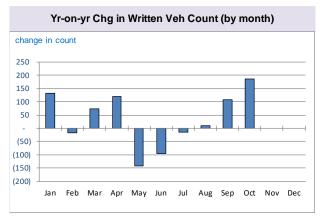


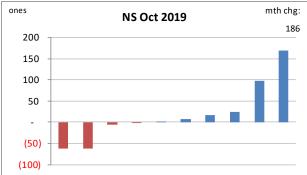


The preceding charts, latest valuation results, and related actuarial present value assumption updates are discussed in more detail in the <u>Nova Scotia RSP October 2019 Operational Report – Actuarial Highlights</u>. The Actuarial Quarterly Valuation Highlights for Risk Sharing Pools as at September 30, 2019 is expected to be posted in January 2020. The actuarial valuation will be updated next as at December 31, 2019 and we anticipate that the results will be reflected in the March 2020 Operational Report.

<sup>&</sup>lt;sup>2</sup>We 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.

## **Management Comments**

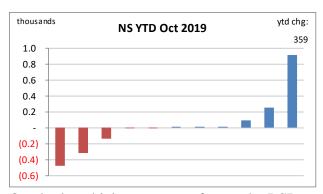




The chart on the left shows the year-on-year change in the vehicles transferred to the RSP by month, with October showing an <u>increase</u> of 186 vehicles. Our projection last month (in part based on previous projections provided by select member company groups) was for a <u>increase</u> of 16 vehicles, indicating a variance of 170 from the actual transfers. This variance was mainly due to one member company group transferring a greater number of vehicles to the RSP in October 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 RSP this month compared with a year ago, while six transferred more. Of the 4 member company groups transferring fewer vehicles, 2 member company

groups accounted for 94% of the total transfer decrease for these "decliner" members. Of the 6 member company groups transferring more vehicles, 2 member company groups accounted for 85% of the total transfer increase for these "grower" members.

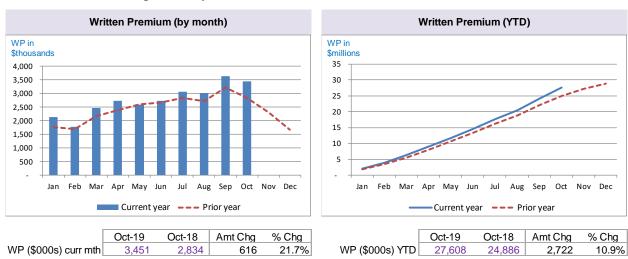


The chart on the left presents the same information as the previous chart, but on a **year-to-date** basis. That is, it shows the overall change in transfer counts year-to-date, broken down by member company group changes (each blue bar represents the change for a single member company group), sorted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

October's vehicle count transfers to the RSP represent a 10.5% <u>in</u>crease from October 2018, and vehicle counts were up 2.2% year-to-date. Average written premium was up 10.2% in October 2019, and was up 8.6% year-to-date (see charts at the top of the next page).



As a result of the movements in transfer vehicle counts and average written premium, the transferred premium was up 21.7% for the month compared with the 3.1% <u>in</u>crease we projected last month, and was up 10.9% year-to-date (see charts below).



## Bulletin F19-093

# Nova Scotia Risk Sharing Pool – October 2019 Operational Report

Should you require any further information, please call Shawn Doherty, Senior Vice President Actuarial & CFO at (416) 644-4968.

Saskia Matheson President & CEO

## **Related links:**

Nova Scotia RSP October 2019 Operational Report – Actuarial Highlights

#### **SUMMARY OF OPERATIONS - CALENDAR YEAR 2019**

Risk Sharing Pool - Nova Scotia Operating Results for the 10 Months Ended October 31, 2019 (Discounted basis) Source: Monthly Operational Report (thousands of dollars)

	January	February	March	April	May	June	July	August	September	October	CY2019 YTD	CY2019 12 MONTHS Updated Projection	CY2018 12 MONTHS Actual
Underwriting Revenue:		,		•	,							•	
Net Premiums Written	\$2,126	\$1,769	\$2,462	\$2,738	\$2,593	\$2,729	\$3,074	\$3,024	\$3,643	\$3,451	\$27,609	\$32,499	\$28,869
Decrease (Increase) in Unearned Premiums	368	479	59	(271)	(246)	(377)	(501)	(428)	(1,097)	(781)	(2,795)	(2,262)	(1,213)
Net Premiums Earned	\$2,494	\$2,248	\$2,521	\$2,467	\$2,347	\$2,352	\$2,573	\$2,596	\$2,546	\$2,670	\$24,814	\$30,237	\$27,656
Claims Incurred:													
Prior Accident Years:													
Undiscounted	(\$14)	(\$17)	(\$834)	(\$5)	\$1,030	(\$48)	(\$3)	(\$512)	\$7	\$512	\$116	\$116	\$195
Effect of Discounting	153	(70)	228	(50)	452	(92)	(35)	(157)	(36)	(54)	339	178	(683)
Discounted	\$139	(\$87)	(\$606)	(\$55)	\$1,482	(\$140)	(\$38)	(\$669)	(\$29)	\$458	\$455	\$294	(\$488)
Current Accident Year:		· · · · · · ·	· · · · · ·	· · · · ·		· · · · · ·	· · · · · · · · · · · · · · · · · · ·	, , ,					
Undiscounted	\$2,422	\$2,185	\$2,429	\$2,381	\$2,586	\$2,344	\$2,517	\$2,356	\$2,458	\$2,838	\$24,516	\$29,819	\$25,819
Effect of Discounting	115	81	126	86	225	123	125	138	115	115	1,249	1,463	872
Discounted	\$2,537	\$2,266	\$2,555	\$2,467	\$2,811	\$2,467	\$2,642	\$2,494	\$2,573	\$2,953	\$25,765	\$31,282	\$26,691
Claims Incurred	\$2,676	\$2,179	\$1,949	\$2,412	\$4,293	\$2,327	\$2,604	\$1,825	\$2,544	\$3,411	\$26,220	\$31,576	\$26,203
Underwriting Expenses:													
Expense Allowance	\$659	\$549	\$763	\$849	\$805	\$847	\$953	\$938	\$1,129	\$1,070	\$8,562	\$10,078	\$8,714
Change in UPDR/DPAC:												. ,	. ,
Undiscounted	10	15	(13)	17	200	18	22	(118)	23	79	253	327	537
Effect of Discounting	(16)	(22)	105	15	214	28	35	39	78	27	503	470	(86)
Discounted	(6)	(7)	92	32	414	46	57	(79)	101	106	756	797	451
Underwriting Expenses	\$653	\$542	\$855	\$881	\$1,219	\$893	\$1,010	\$859	\$1,230	\$1,176	\$9,318	\$10,875	\$9,165
Net Underwriting Gain (Loss)	(\$835)	(\$473)	(\$283)	(\$826)	(\$3,165)	(\$868)	(\$1,041)	(\$88)	(\$1,228)	(\$1,917)	(\$10,724)	(\$12,214)	(\$7,712)
Administrative Expenses	\$49	\$59	\$41	\$50	\$51	\$53	\$65	\$48	\$50	\$60	\$526	\$731	\$608
•													
Operating Result	(\$884)	(\$532)	(\$324)	(\$876)	(\$3,216)	(\$921)	(\$1,106)	(\$136)	(\$1,278)	(\$1,977)	(\$11,250)	(\$12,945)	(\$8,320)
Ratios: Claims & Expenses Incurred (Earned)													
Prior Accident Years	5.6%	-3.9%	-24.0%	-2.2%	63.1%	-6.0%	-1.5%	-25.8%	-1.1%	17.2%	1.8%	1.0%	-1.8%
Current Accident Year	101.7%	100.8%	101.3%	100.0%	119.8%	104.9%	102.7%	96.1%	101.1%	110.6%	103.8%	103.5%	96.5%
All Accident Years Combined	107.3%	96.9%	77.3%	97.8%	182.9%	98.9%	101.2%	70.3%	100.0%	127.8%	105.6%	104.5%	94.7%
Underwriting & Administrative Expenses (Earned)	28.1%	26.7%	35.5%	37.7%	54.1%	40.2%	41.8%	34.9%	50.3%	46.3%	39.7%	38.4%	35.3%
Combined Operating Ratio	135.4%	123.6%	112.8%	135.5%	237.0%	139.1%	143.0%	105.2%	150.3%	174.1%	145.3%	142.9%	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 Facilty Association premium dollars invested directly by members.

Rounding difference may apply