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TO: MEMBERS OF THE FACILITY ASSOCIATION

**ATTENTION: CHIEF EXECUTIVE OFFICER** 

NOVA SCOTIA RISK SHARING POOL PROJECT MANAGER

**BULLETIN NO.:** F2020 – 073

**DATE: SEPTEMBER 29, 2020** 

**SUBJECT:** NOVA SCOTIA RISK SHARING POOL

- AUGUST 2020 OPERATIONAL REPORT

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

Please be advised that the August 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 a review and assessment of the incurred impacts associated with the COVID-19 pandemic;
- (b) This month's results include the *implementation of the 2020 Q2 valuation*, resulting in an estimated \$8.7 million favourable impact, FA Management in conjunction with FA's Appointed Actuary will be scheduling a member call mid-October to provide further discussion of the 2020 Q2 valuation impact;
- (c) The 2020 year-to-date net operating deficit was \$5.3 million, with a COR of 123.0% on earned premium of \$23.0 million; and
- (d) The projected 2020 year-end net operating deficit is now \$11.4 million, with a COR at 131.1% on earned premium of \$36.6 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 Q2 valuation as well as updated written premium projections received from certain members.

## **New This Month**

#### Valuation

A valuation of the Nova Scotia Risk Sharing Pool ("RSP") as at June 30, 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.

## Nova Scotia Risk Sharing Pool – August 2020 Operational Report

The implementation of the new valuation resulted in an estimated overall **\$8.7 million favourable** impact on the month's net result from operations, subtracting an estimated 38.1 points to the year-to-date Combined Operating Ratio (ending at 123.0%). The impact is summarized in the following tables<sup>1</sup>.

NS		unfav /	(fav) for t	he month a	nd ytd		ytd EP	22,974	(actual)			
		IMPAC	CT in \$000s	from chang	es in:	IMPACT unfav / (fav) as % ytd EP from changes in:						
	ults & payout patterns			dsct rate	margins		ults &	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	(3,661)	(416)	(4,077)	410	(96)	(3,763)	(15.9%)	(1.8%)	(17.7%)	1.8%	(0.4%)	(16.4%)
CAY	(2,811)	(307)	(3,118)	208	-	(2,910)	(12.2%)	(1.3%)	(13.6%)	0.9%	-	(12.7%)
Prem Def	(2,083)	(209)	(2,292)	222	-	(2,070)	(9.1%)	(0.9%)	(10.0%)	1.0%	-	(9.0%)
TOTAL	(8,555)	(932)	(9,487)	840	(96)	(8,743)	(37.2%)	(4.1%)	(41.3%)	3.7%	(0.4%)	(38.1%)

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 -\$5.3 million and the incurred loss ratio to the end of eight months is 85.5%, as summarized in the following table.

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

		August	August	Year to date	Year to Date
Amounts in	Amounts in \$000s		2019	Aug 2020	Aug 2019
Premium Wri	tten	5,036	3,024	26,359	20,515
Premium Earn	ned	3,261	2,596	22,974	19,598
Incurred Loss	es	(3,186)	1,825	19,655	20,265
Underwriting	& Admin Expense	4	907	8,624	7,328
Operating R	esult	6,443	(136)	(5,305)	(7,995)
Ratios:					
Loss ratio	- Prior Accident Years	(117.2%)	(25.8%)	(10.8%)	0.1%
	- Current Accident Year	19.5%	96.1%	96.3%	103.3%
	Total	(97.7%)	70.3%	85.5%	103.4%
Underwriting & Admin Expense		0.1%	34.9%	37.5%	37.4%
Combined O <sub>I</sub>	perating Ratio	(97.6%)	105.2%	123.0%	140.8%

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 2020" attached to this bulletin.

<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".

#### *Updated Projection to Year-end 2020*

The projected calendar year Operating Result to December 2020 is -\$11.4 million and the estimated combined operating ratio to December 2020 is 131.1%, 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	Current	Prior Mth		Final 2020	
Amounts in \$000s	(Aug 2020)	(Jul 2020)	Change	Outlook*	
Premium Written	42,376	41,304	1,072	38,176	
Premium Earned	36,561	36,161	400	35,830	
Incurred Losses	32,071	39,856	(7,785)	36,407	
Underwriting & Admin Expense	15,875	17,062	(1,187)	13,949	
Net Result from Operations	(11,385)	(20,757)	9,372	(14,526)	
Ratios:					
Loss ratio - Prior Accident Years	(7.7%)	2.5%	(10.2%)	(2.1%)	
- Current Accident Year	95.4%	107.7%	(12.3%)	103.7%	
Total	87.7%	110.2%	(22.5%)	101.6%	
Underwriting & Admin Expense	43.4%	47.2%	(3.8%)	38.9%	
Combined Operating Ratio	131.1%	157.4%	(26.3%)	140.5%	

rounding differences may occur

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

This updated projection in Net Result from Operations to the end of the year has improved by \$9.4 million from the projection provided last month (see the second and third columns in the table). The updated projection includes the overall \$9.9 million favourable impact of the valuation, as at June 30, 2020, as summarized in the following table (see more information under "Effect of Quarterly Valuation" on page 4). The remaining difference was driven by the overall decrease in projected written premium and the associated impacts on earned premium, claims, and expense projections.

NS		unfav /	<mark>(fav)</mark> proje	ected for fu	II year		year EP	17,884	(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 &	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	(3,661)	(394)	(4,055)	385	(83)	(3,753)	(20.5%)	(2.2%)	(22.7%)	2.2%	(0.5%)	(21.0%)
CAY	(4,455)	(350)	(4,805)	307	-	(4,498)	(24.9%)	(2.0%)	(26.9%)	1.7%	-	(25.2%)
Prem Def	(1,706)	(178)	(1,884)	263	-	(1,621)	(9.5%)	(1.0%)	(10.5%)	1.5%	-	(9.1%)
TOTAL	(9,822)	(922)	(10,744)	955	(83)	(9,872)	(54.9%)	(5.2%)	(60.1%)	5.3%	(0.5%)	(55.2%)

#### Current Month Results

The Nova Scotia Risk Sharing Pool produced a \$6.4 million Operating Result in the month of August 2020, a \$6.6 million improvement from the same month last year, mainly driven by the overall decrease in the combined ratio (from 105.5% to -97.6% applied to \$3.3 million in earned premium.

This month's results moved the year-to-date combined operating ratio from 159.5% at the end of seven months to 123.0% at the end of seven months. The 36.5 percentage point decrease is composed of a 17.6 percentage point decrease in Prior Accident Years Loss Ratio, a 12.7 percentage point decrease in the Current Accident Year loss ratio, and 6.2 percentage point decrease in the expense ratio.

# **Variances 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

August 2020	Actual	Projection	Diffe rence	Difference %
Written Premium	5,036	4,266	770	18.0%
Earned Premium	3,261	3,249	12	0.4%
Reported Losses				
Paid Losses	865	1,696	(831)	(49.0%)
Paid Expenses	67	86	(19)	(22.1%)
Change in Outstanding Losses	(395)	654	(1,049)	(160.4%)
Total Reported Losses	537	2,436	(1,899)	(78.0%)
Change in IBNR Provision *	(3,723)	949	(4,672)	
Change in Premium Deficiency (DPAC) *	(1,655)	312	(1,967)	

(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 August 2020, total reported losses were \$1.9 million lower than projected. The Current Accident Year had a \$1.1 million favourable variance in reported losses, and the Prior Accident Years had a \$0.7 million favourable 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 the 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 August 2020 Nova Scotia Risk Sharing Pool Operational Report reflects the results of an updated valuation as at June 30, 2020, with the associated impacts in relation to the results for August 2020 summarized in the following table.

DCD: N ---- C---1'-

NS		unfav /	' (fav) for t	he month a	nd ytd		mth EP	3,261	(actual)			
		IMPA	CT in \$000s	from chang	ges in:		IMPACT unfav / (fav) as % mth EP from changes in:					
	ults &	payout pat	terns	dsct rate	margins		ults &	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	(3,661)	(416)	(4,077)	410	(96)	(3,763)	(112.3%)	(12.8%)	(125.0%)	12.6%	(2.9%)	(115.4%)
CAY	(2,811)	(307)	(3,118)	208	-	(2,910)	(86.2%)	(9.4%)	(95.6%)	6.4%	-	(89.2%)
Prem Def	(2,083)	(209)	(2,292)	222	-	(2,070)	(63.9%)	(6.4%)	(70.3%)	6.8%	-	(63.5%)
TOTAL	(8,555)	(932)	(9,487)	840	(96)	(8,743)	(262.3%)	(28.6%)	(290.9%)	25.8%	(2.9%)	(268.1%)

The valuation result is due to changes generated from updated nominal ultimate selections and projected cash flows (generating a \$9.5 million favourable impact — see column [3] in the preceding table on the left), partially offset by the impact due to a 39 basis point <u>decrease</u> in the selected discount rate (from 0.62% to 0.23% generating a \$0.8 million <u>unfavourable</u> impact — see column [4] in the preceding table on the left).

While there was no change in the margin for adverse deviation in investment yield (remains at 25 basis points), as per our usual practice with the June 30 valuations, 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 12 valuation 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).

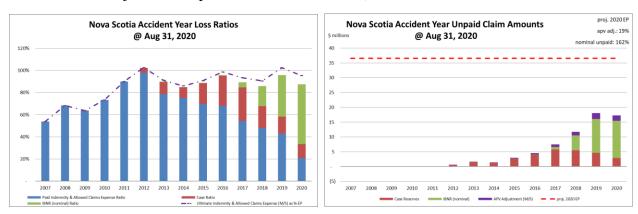
RSP: Nova Sco as at: 2020 Q2	•	unfavourah	ole / (favourable)	Valuation Impler	nentation Imp	act (\$000s)	\$000s		
Valuation	period implemented	updated LRs &	APVs @ prior assumptions	updated dsct rate	updated margins	Total Impact	Booked Policy Liabilities	Total Impact as % Book Liabs	Nominal Impact as % Book Liabs
		[1]	[2]	[3]	[4]	[5] = sum([1] to [4])	[6]	[7] = [5] / [6]	[8] =[1]/[6]
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%)
2020 Q2	Aug 2020	(8,555)	(932)	840	(96)	(8,743)	88,459	(9.9%)	(9.7%)
12-qtrs	-	(4,804)	(457)	2,322	(218)	(3,157)			
% of total		152.2% 7 un	14.5% nfavourable (nom	(73.6%) ninal) valuations	6.9%	100.0%		4 impacts wer	e outside of 2.5%
Averages									
12-qtrs		(400)	(38)	194	(18)	(263)	67,719	(0.4%)	(0.6%)
2017 Q3 to 2019 Q2		240	42	(29)	(15)	238	60,442	0.4%	0.4%
2019 Q3 to 2020 Q2		(1,681)	(198)	638	(24)	(1,265)	82,271	(1.5%)	(2.0%)

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 \$4.8 million favourable. We note that the average impact of the most recent 6 valuations is significantly more favourable than the earlier 6 valuations were <u>unfavourable</u>. That said, the 12-quarter average at \$0.4 million (nominal only) represents 0.6% of ending policy liabilities per column [8], which we would view as not significant.
- (ii) Nominal size measurement: This objective has <u>not</u> 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). We are currently in the process of reviewing the valuation process (including how assumptions are struck, the accuracy of various valuation methodologies, and our default selections), impacting the current 2020 Q2 valuation result. We expect this review to continue over the next 2-5 months.
- (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 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 moving toward our target impacts (long term zero impact; individual valuation impact of no more than 2.5% of policy liabilities; no bias evident).

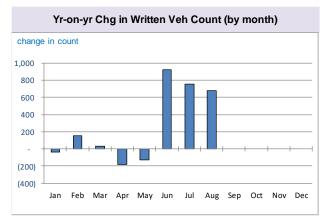
The following charts summarize the current view of the historical loss ratios (indemnity and allowed claims adjustment expenses on a nominal basis) and the associated claims liabilities.

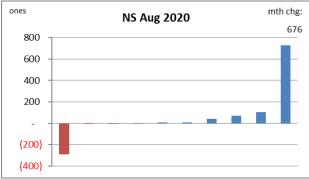


The actuarial valuation will be updated next as at September 30, 2020 and we anticipate that the results will be reflected in the October 2020 Operational Report.

<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**

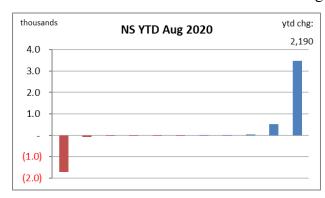




The chart on the left shows the year-on-year change in the vehicles transferred to the RSP by month, with August showing an <u>increase</u> of 676 vehicles. Our projection last month (in part based on previous projections provided by select member company groups) was for an <u>increase</u> of 247 vehicles, indicating a variance of 429 from the actual transfers. This variance was mainly due to one member company group transferring a higher number of vehicles to the RSP 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 or red bar represents the change for a single member company group), sorted by magnitude of change. Three member company groups transferred fewer vehicles to the RSP this month compared with a year ago, while seven transferred more. Of the 3 member company groups transferring fewer vehicles, 1 member

company group accounted for 98% of the total transfer decrease for these "decliner" members. Of the 7 member company groups transferring more vehicles, 1 member company group accounted for 75% 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.

August's vehicle count transfers to the RSP represent a 36.1% <u>in</u>crease from August 2019, and counts were up 17.3% year-to-date. Average written premium was up 22.4% in August 2020, and up 9.5% year-to date (see the following charts).



As a result of the movements in transfer vehicle counts and average written premium, the transferred premium was up 66.5% for the month compared with the 41.1% <u>in</u>crease we projected last month, and was up 28.5% year-to-date (see the following charts).



# Bulletin F2020–073 Nova Scotia Risk Sharing Pool – August 2020 Operational Report

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 August 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 Operating Results for the 8 Months Ended August 31, 2020 (Discounted basis) Source: Monthly Operational Report (thousands of dollars)

	January	February	March	April	May	June	July	August	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	\$4,647	\$4,755	\$5,036	\$26,359	\$42,376	\$33,046
Decrease (Increase) in Unearned Premiums	657	464	(4)	320	492	(1,887)	(1,652)	(1,775)	(3,385)	(5,815)	(2,781)
Net Premiums Earned	\$2,825	\$2,676	\$2,727	\$2,763	\$2,859	\$2,760	\$3,103	\$3,261	\$22,974	\$36,561	\$30,265
Claims Incurred:											
Prior Accident Years:											
Undiscounted	(\$17)	(\$11)	\$567	(\$24)	\$139	(\$32)	(\$13)	(\$3,673)	(\$3,064)	(\$3,064)	\$107
Effect of Discounting	92	(50)	(292)	(38)	1,154	(60)	(71)	(150)	585	245	249
Discounted	\$75	(\$61)	\$275	(\$62)	\$1,293	(\$92)	(\$84)	(\$3,823)	(\$2,479)	(\$2,819)	\$356
Current Accident Year:											
Undiscounted	\$2,802	\$2,651	\$3,195	\$2,873	\$2,465	\$2,783	\$3,103	\$449	\$20,321	\$32,210	\$29,858
Effect of Discounting	200	176	94	154	525	230	246	188	1,813	2,680	1,505
Discounted	\$3,002	\$2,827	\$3,289	\$3,027	\$2,990	\$3,013	\$3,349	\$637	\$22,134	\$34,890	\$31,363
Claims Incurred	\$3,077	\$2,766	\$3,564	\$2,965	\$4,283	\$2,921	\$3,265	(\$3,186)	\$19,655	\$32,071	\$31,719
Underwriting Expenses:											
Expense Allowance	\$689	\$701	\$867	\$775	\$751	\$1,474	\$1,508	\$1,597	\$8,362	\$13,439	\$10,247
Change in UPDR/DPAC:											
Undiscounted	3	11	792	14	(473)	167	192	(1,850)	(1,144)	188	279
Effect of Discounting	(42)	(33)	(20)	(21)	416	187	169	195	851	1,233	504
Discounted	(39)	(22)	772	(7)	(57)	354	361	(1,655)	(293)	1,421	783
Underwriting Expenses	\$650	\$679	\$1,639	\$768	\$694	\$1,828	\$1,869	(\$58)	\$8,069	\$14,860	\$11,030
Net Underwriting Gain (Loss)	(\$902)	(\$769)	(\$2,476)	(\$970)	(\$2,118)	(\$1,989)	(\$2,031)	\$6,505	(\$4,750)	(\$10,370)	(\$12,484)
Administrative Expenses	\$60_	\$85	\$61	\$70	\$67	\$75	\$75	\$62	\$555	\$1,015	\$753
Operating Result	(\$962)	(\$854)	(\$2,537)	(\$1,040)	(\$2,185)	(\$2,064)	(\$2,106)	\$6,443	(\$5,305)	(\$11,385)	(\$13,237)
Ratios:											
Claims & Expenses Incurred (Earned)											
Prior Accident Years	2.7%	-2.3%	10.1%	-2.2%	45.2%	-3.3%	-2.7%	-117.2%	-10.8%	-7.7%	1.2%
Current Accident Year	106.3%	105.6%	120.6%	109.6%	104.6%	109.2%	107.9%	19.5%	96.3%	95.4%	103.6%
All Accident Years Combined	109.0%	103.3%	130.7%	107.4%	149.8%	105.9%	105.2%	-97.7%	85.5%	87.7%	104.8%
Underwriting & Administrative Expenses (Earned)	25.1%	28.6%	62.3%	30.3%	26.6%	68.9%	62.6%	0.1%	37.5%	43.4%	38.9%
Combined Operating Ratio	134.1%	131.9%	193.0%	137.7%	176.4%	174.8%	167.8%	-97.6%	123.0%	131.1%	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