

777 Bay Street, Suite 2400 T: 416 863 1750 P.O. Box 121 Toronto, Ontario M5G 2C8

F: 416 868 0894 E: mail@facilityassociation.com

TO: MEMBERS OF THE FACILITY ASSOCIATION

ATTENTION: CHIEF EXECUTIVE OFFICER

NOVA SCOTIA RISK SHARING POOL PROJECT MANAGER

BULLETIN NO.: F19 – 075

DATE: **SEPTEMBER 27, 2019**

SUBJECT: NOVA SCOTIA RISK SHARING POOL

- AUGUST 2019 OPERATIONAL REPORT

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

Please be advised that the August 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 June 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 \$0.9 million favourable impact on the month's net result from operations, subtracting an estimated 4.7 points to the yearto-date Combined Operating Ratio (ending at 140.8%). The impact is summarized in the tables below¹.

NS		unfav /	(fav) for t	he month a	nd ytd	ytd EP	19,598	(actual)				
		IMPA	CT in \$000s	from chang	es in:	IMPACT unfav / (fav) as % ytd EP from changes in:						
	ults &	payout pat	terns	dsct rate	margins	rgins 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	(512)	(27)	(539)	10	(71)	(600)	(2.6%)	(0.1%)	(2.8%)	0.1%	(0.4%)	(3.1%)
CAY	(179)	(14)	(193)	14	-	(179)	(0.9%)	(0.1%)	(1.0%)	0.1%	-	(0.9%)
Prem Def	(144)	9	(135)	-	-	(135)	(0.7%)	-	(0.7%)	-	-	(0.7%)
TOTAL	(835)	(32)	(867)	24	(71)	(914)	(4.3%)	(0.2%)	(4.4%)	0.1%	(0.4%)	(4.7%)

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

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".

Summary of Financial Results

The calendar year-to-date Operating Result is -\$8.0 million and the incurred loss ratio to the end of 8 months is 103.4%, as summarized in the table below.

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

Amounts in \$000s	August 2019	August 2018	Year to date Aug 2019	Year to Date Aug 2018
Premium Written	3,024	2,722	20,515	18,841
Premium Earned	2,596	2,304	19,598	18,089
Incurred Losses	1,825	2,181	20,265	16,604
Underwriting & Admin Expense	907	946	7,328	6,440
Operating Result	(136)	(136) (823)		(4,955)
Ratios:				
Loss ratio - Prior Accident Years	(25.8%)	(0.8%)	0.1%	(6.5%)
- Current Accident Year	96.1%	95.4%	103.3%	98.3%
Total	70.3%	94.6%	103.4%	91.8%
Underwriting & Admin Expense	34.9%	41.1%	37.4%	35.6%
Combined Operating Ratio	105.2%	135.7%	140.8%	127.4%

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 -\$12.0 million and the estimated combined operating ratio to December 2019 is 139.9%, as summarized in the table at 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	(Aug 2019)	(Jul 2019)	Change	Outlook*
Premium Written	31,560	30,388	1,172	31,089
Premium Earned	29,995	29,776	219	30,272
Incurred Losses	30,585	31,199	(614)	30,014
Underwriting & Admin Expense	11,395	11,040	355	11,148
Net Result from Operations	(11,985)	(12,463)	478	(10,890)
Ratios:				
Loss ratio - Prior Accident Years	(0.8%)	1.2%	(2.0%)	(1.5%)
- Current Accident Year	102.7%	103.6%	(0.9%)	100.7%
Total	101.9% 104.89		(2.9%)	99.2%
Underwriting & Admin Expense	38.0%	37.1%	0.9%	36.8%
Combined Operating Ratio	139.9%	141.9%	(2.0%)	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 \$0.5 million from the projection provided last month (see the second and third columns in the table), and included the overall \$0.9 million favourable impact of the June 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	/ (fav) proj	ected for f	ull year	year EP	15,619	(projecte	d this mont	h)		
		IMPA	.CT in \$000s	from chan	ges in:	IMPACT unfav / (fav) as % full year EP from changes in:						
	ults &	payout pat	terns	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	(512)	(26)	(538)	9	(62)	(591)	(3.3%)	(0.2%)	(3.4%)	0.1%	(0.4%)	(3.8%)
CAY	(272)	(15)	(287)	22	-	(265)	(1.7%)	(0.1%)	(1.8%)	0.1%	-	(1.7%)
Prem Def	(101)	12	(89)	-	-	(89)	(0.6%)	0.1%	(0.6%)	-	-	(0.6%)
TOTAL	(885)	(29)	(914)	31	(62)	(945)	(5.7%)	(0.2%)	(5.9%)	0.2%	(0.4%)	(6.1%)

Current Month Results

The Nova Scotia Risk Sharing Pool produced a -\$0.1 million Operating Result in the month of August 2019, a \$0.7 million improvement from the same month last year. This improvement is composed of a \$0.8 million improvement stemming from the overall decrease in the combined ratio (from 135.7% to 105.2% applied to \$2.6 million in earned premium), offset by a \$0.1 million unfavourable impact associated with the \$0.3 million increase in earned premium (at a combined ratio of 135.7%).

This month's results moved the year-to-date combined operating ratio from 146.3% at the end of 7 months to 140.8% at the end of 8 months. The 5.5 percentage point decrease is composed of a 4.0 percentage point decrease in the Prior Accident Years loss ratio, coupled with a 1.1 percentage

point decrease in the Current Accident Year loss ratio, and a 0.4 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.

NS RSP Summary of Actual vs Projected variances

August 2019	Actual	Projection	Difference	Difference %
Written Premium	3,024	3,005	19	0.6%
Earned Premium	2,596	2,621	(25)	(1.0%)
Reported Losses				
Paid Losses	1,428	1,538	(110)	(7.2%)
Paid Expenses	72	90	(18)	(20.0%)
Change in Outstanding Losses	850	100	750	750.0%
Total Reported Losses	2,350	1,728	622	36.0%
Change in IBNR Provision *	(525)	897	(1,422)	
Change in Premium Deficiency (DPAC) *	(79)	54	(133)	

(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 2019, reported losses were \$0.6 million higher than projected. The Current Accident Year had a \$0.4 million <u>unfavourable</u> variance in reported losses, and the Prior Accident Years had a \$0.2 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 August 2019 Nova Scotia Risk Sharing Pool Operational Report reflects the results of an updated valuation as at June 30, 2019, with the associated impacts in relation to the results for August 2019 summarized in the table at the top of the next page.

^{*}Detailed information is included at Nova Scotia RSP August 2019 Operational Report - Actuarial Highlights.

NS		unfav ,	/ <mark>(fav)</mark> for tl	he month a	nd ytd	mth EP	2,596	(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	(512)	(27)	(539)	10	(71)	(600)	(19.7%)	(1.0%)	(20.8%)	0.4%	(2.7%)	(23.1%)
CAY	(179)	(14)	(193)	14	-	(179)	(6.9%)	(0.5%)	(7.4%)	0.5%	-	(6.9%)
Prem Def	(144)	9	(135)	-	-	(135)	(5.5%)	0.3%	(5.2%)	-	-	(5.2%)
TOTAL	(835)	(32)	(867)	24	(71)	(914)	(32.2%)	(1.2%)	(33.4%)	0.9%	(2.7%)	(35.2%)

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 left table above), partially offset by the impact due to a 2 basis point <u>decrease</u> in the selected discount rate (from 1.43% to 1.41% generating a \$24 thousand <u>unfavourable</u> impact – see column [4] in the left table above). 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 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 as at: 2019 Q2	•	unfavourak	olo / (favourable)	Valuation Impler	nontation Imn	act (\$000c)	\$000s		
Valuation period implemented		updated LRs &		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]
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%)
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%)
12-qtrs	-	(1,986)	(71)	(898)	(209)	(3,164)			
% of total		62.8%	2.2%	28.4%	6.6%	100.0%			
		7 un	nfavourable (nom	inal) valuations				5 impacts wer	e outside of 2.5%
Averages									
12-qtrs		(166)	(6)	(75)	(17)	(264)	55,483	(0.5%)	(0.3%)
2016 Q3 to 2018 Q2		(334)	(31)	(199)	(17)	(581)	50,327	(1.2%)	(0.7%)
2018 Q3 to 2019 Q2		172	43	173	(18)	370	65,796	0.6%	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 $1/3^{rd}$ of nominal valuation impacts will be <u>unfavourable</u>, and $2/3^{rds}$ will be favourable (due to the skewness of the development). On these 3 measures:

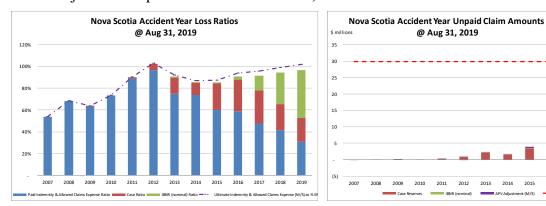
- (i) **Best estimate measurement: This objective has <u>not</u> been met**, as the 12-quarter nominal change in column [1] is \$2.0 million favourable. That said, the <u>average</u> favourable impact over the 12 quarters at \$0.2 million (nominal only) represents 0.3% of ending policy liabilities per 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.

apv adj.: 14%

nominal unpaid: 164%

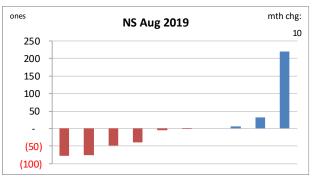


The preceding charts, latest valuation results, and related actuarial present value assumption updates are discussed in more detail in the <u>Nova Scotia RSP August 2019 Operational Report – Actuarial Highlights</u>. The Actuarial Quarterly Valuation Highlights for Risk Sharing Pools as at June 30, 2019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

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.

Management Comments

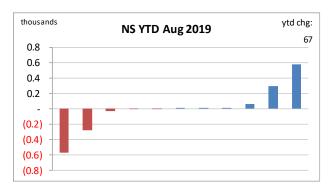




The chart on the left shows the year-on-year change in the vehicles transferred to the RSP by month, with August showing an <u>increase</u> of 10 vehicles. Our projection last month (in part based on previous projections provided by select member company groups) was for a <u>increase</u> of 23 vehicles, indicating a variance of 13 from the actual transfers. This variance was mainly due to one member company group transferring a lower number of vehicles to the RSP in August than projected.

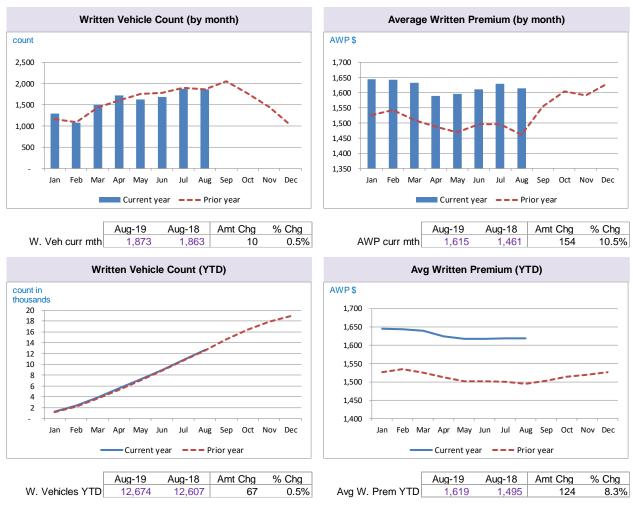
The chart on the left shows the overall change in the **month**, broken down by member company group changes (each blue bar represents the change for a single member company group), sorted by magnitude of change. Six member company groups transferred fewer vehicles to the RSP this month compared with a year ago, while three transferred more, and one remained the same. Of the 6 member company groups transferring

fewer vehicles, 1 member company group accounted for 31% of the total transfer decrease for these "decliner" members. Of the 3 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 RSP represent a 0.5% <u>increase</u> from August 2018, and vehicle counts were up 0.5% year-to-date. Average written premium was up 10.5% in August 2019, and was up 8.3% 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 11.1% for the month compared with the 10.4% <u>in</u>crease we projected last month, and was up 8.9% year-to-date (see charts immediately below).



Bulletin F19–075

Nova Scotia Risk Sharing Pool – August 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 August 2019 Operational Report – Actuarial Highlights

SUMMARY OF OPERATIONS - CALENDAR YEAR 2019

Risk Sharing Pool - Nova Scotia

Operating Results for the 8 Months Ended August 31, 2019 (Discounted basis)

Source: Monthly Operational Report

(thousands of dollars)

	January	February	March	April	May	June	July	August	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	\$20,515	\$31,560	\$28,869
Decrease (Increase) in Unearned Premiums	368	479	59	(271)	(246)	(377)	(501)	(428)	(917)	(1,565)	(1,213)
Net Premiums Earned	\$2,494	\$2,248	\$2,521	\$2,467	\$2,347	\$2,352	\$2,573	\$2,596	\$19,598	\$29,995	\$27,656
Claims Incurred:											
Prior Accident Years:											
Undiscounted	(\$14)	(\$17)	(\$834)	(\$5)	\$1,030	(\$48)	(\$3)	(\$512)	(\$403)	(\$403)	\$195
Effect of Discounting	153	(70)	228	(50)	452	(92)	(35)	(157)	429	174	(683)
Discounted	\$139	(\$87)	(\$606)	(\$55)	\$1,482	(\$140)	(\$38)	(\$669)	\$26	(\$229)	(\$488)
Current Accident Year:											
Undiscounted	\$2,422	\$2,185	\$2,429	\$2,381	\$2,586	\$2,344	\$2,517	\$2,356	\$19,220	\$29,286	\$25,819
Effect of Discounting	115	81	126	86	225	123	125	138	1,019	1,528	872
Discounted	\$2,537	\$2,266	\$2,555	\$2,467	\$2,811	\$2,467	\$2,642	\$2,494	\$20,239	\$30,814	\$26,691
Claims Incurred	\$2,676	\$2,179	\$1,949	\$2,412	\$4,293	\$2,327	\$2,604	\$1,825	\$20,265	\$30,585	\$26,203
Underwriting Expenses:											
Expense Allowance	\$659	\$549	\$763	\$849	\$805	\$847	\$953	\$938	\$6,363	\$9,787	\$8,714
Change in UPDR/DPAC:		*				• -			*-,	*-, -	* - ,
Undiscounted	10	15	(13)	17	200	18	22	(118)	151	328	537
Effect of Discounting	(16)	(22)	105	15	214	28	35	39	398	454	(86)
Discounted	(6)	(7)	92	32	414	46	57	(79)	549	782	451
Underwriting Expenses	\$653	\$542	\$855	\$881	\$1,219	\$893	\$1,010	\$859	\$6,912	\$10,569	\$9,165
Onderwriting Expenses	\$033	\$342	φουυ	Ф 00 I	\$1,219	4093	\$1,010	\$639	\$0,912	\$10,509	φ9,103
Net Underwriting Gain (Loss)	(\$835)	(\$473)	(\$283)	(\$826)	(\$3,165)	(\$868)	(\$1,041)	(\$88)	(\$7,579)	(\$11,159)	(\$7,712)
Administrative Expenses	\$49	\$59	\$41	\$50	\$51	\$53	\$65	\$48	\$416	\$826	\$608
Operating Result	(\$884)	(\$532)	(\$324)	(\$876)	(\$3,216)	(\$921)	(\$1,106)	(\$136)	(\$7,995)	(\$11,985)	(\$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%	0.1%	-0.8%	-1.8%
Current Accident Year	101.7%	100.8%	101.3%	100.0%	119.8%	104.9%	102.7%	96.1%	103.3%	102.7%	96.5%
All Accident Years Combined	107.3%	96.9%	77.3%	97.8%	182.9%	98.9%	101.2%	70.3%	103.4%	101.9%	94.7%
Underwriting & Administrative Expenses (Earned)	28.1%	26.7%	35.5%	37.7%	54.1%	40.2%	41.8%	34.9%	37.4%	38.0%	35.3%
Combined Operating Ratio	135.4%	123.6%	112.8%	135.5%	237.0%	139.1%	143.0%	105.2%	140.8%	139.9%	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 Facility Association premium dollars invested directly by members.

Rounding difference may apply