

TO: MEMBERS OF THE FACILITY ASSOCIATION

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

BULLETIN NO.: F17– 046

DATE: JUNE 29, 2017

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

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

Please be advised that the May 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

Annual Update of Member Sharing Ratios

The May 2017 Operational Report reflects the annual update of member sharing ratios for Accident Years 2015, 2016, 2017 and 2018. Please refer to Bulletin [F17-052](#) for additional information.

Valuation

A valuation of the Nova Scotia Risk Sharing Pool (“RSP”) as at March 31, 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 **\$0.2 million unfavourable** 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 110.0%). 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 F17-046
Nova Scotia Risk Sharing Pool – May 2017 Operational Report

NS	unfav / (fav) for the month and ytd						ytd EP 6,412 (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	(18)	(1)	(19)	63	-	44	(0.3%)	-	(0.3%)	1.0%	-	0.7%
CAY	59	8	67	10	-	77	0.9%	0.1%	1.0%	0.2%	-	1.2%
Prem Def	62	3	65	19	-	84	1.0%	-	1.0%	0.3%	-	1.3%
TOTAL	103	10	113	92	-	205	1.6%	0.2%	1.8%	1.4%	-	3.2%

The valuation result is due to changes generated from updated nominal ultimate selections and projected cash flows (generating a \$0.1 million unfavourable impact – see column [3] in the left table above), offset by the impact of an 8 basis point decrease in the selected discount rate (from 1.01% to 0.93%, generating a \$0.1 million unfavourable impact – see column [4] in the left table above). There was no change in the margin for adverse deviation in investment yield (remains at 25 basis points), and no changes to the margins for adverse deviation for claims development as selected at the coverage / accident year level with this valuation (therefore generating no impact – see column [5] in the left table above).

Management has observed favourable total valuation impacts over the last 8 valuation implementations, with 5 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).

RSP: Nova Scotia, as at: 2017 Q1		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 Q2	Aug	1,510	195	(265)	(116)	1,324	39,491	3.4%
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%
8-qtrs	-	346	160	(282)	(1,034)	(810)		
% of total		(42.7%)	(19.8%)	34.8%	127.7%	100.0%		
Averages								
8-qtrs		43	20	(35)	(129)	(101)	42,332	(0.2%)
2015 Q2 to 2016 Q1		229	61	8	(29)	269	40,228	0.7%
2016 Q2 to 2017 Q1		(142)	(21)	(79)	(230)	(472)	44,436	(1.1%)

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. While this objective is reasonably close to having been achieved overall, we note as a smaller pool, it is subject to higher levels of process variance, driving volatility in the ultimate selection. It is also important to bear in mind that the impacts in column [4] are largely outside

Bulletin F17-046
Nova Scotia Risk Sharing Pool – May 2017 Operational Report

of the control of FA (as being related to macroeconomic factors), and, for this RSP, has accounted for a significant portion of the overall valuation implementation impacts.

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

Summary of Financial Results

The calendar year-to-date Operating Result is -\$0.6 million and the incurred loss ratio to the end of 5 months is 72.6%, as summarized in the table below.

Amounts in \$000s	May 2017	May 2016	Year to date May 2017	Year to Date May 2016
Premiums Written	2,082	1,631	7,085	5,681
Premiums Earned	1,398	1,244	6,412	5,964
Claims Incurred	1,516	1,654	4,655	6,230
General Expenses	844	674	2,400	1,766
Operating Result	(962)	(1,084)	(643)	(2,032)
Ratios:				
Loss ratio % - Prior Accident Years	(1.1%)	24.9%	(33.7%)	(2.6%)
- Current Accident Year	109.5%	108.0%	106.3%	107.1%
<i>Total</i>	108.4%	132.9%	72.6%	104.5%
General Expenses %	60.4%	54.2%	37.4%	29.6%
Combined Operating Ratio	168.8%	187.1%	110.0%	134.1%

Rounding differences may apply.

These results are discussed in some detail in the “Current Month Results” section below. 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 -\$9.5 million and the estimated combined operating ratio to December 2017 is 146.8%. This updated projection to the end of the year has deteriorated by approximately \$0.7 million from the projection provided last month (-\$8.8 million and 144.3%), mainly due to the overall unfavourable impact of the March 31, 2017 valuation, as summarized in the table at the top of the next page (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.

Bulletin F17-046

Nova Scotia Risk Sharing Pool – May 2017 Operational Report

NS	unfav / (fav) projected for full year						year EP 11,523 (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	(18)	(1)	(19)	54	-	35	(0.2%)	-	(0.2%)	0.5%	-	0.3%
CAY	184	114	298	32	-	330	1.6%	1.0%	2.6%	0.3%	-	2.9%
Prem Def	1	(1)	-	39	-	39	-	-	-	0.3%	-	0.3%
TOTAL	167	112	279	125	-	404	1.4%	1.0%	2.4%	1.1%	-	3.5%

Current Month Results

The Nova Scotia Risk Sharing Pool produced a -\$1.0 million Operating Result in the month of May 2017, a \$0.1 million improvement from the same month last year. This improvement is composed of an estimated \$0.1 million unfavourable impact associated with the \$0.2 million increase in earned premium (at a combined ratio of 187.1%), offset by an approximately \$0.2 million improvement stemming from the overall decrease in the combined ratio (from 187.1% to 168.8% applied to \$1.4 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 93.6% at the end of 4 months to 110.0% at the end of 5 months. The 16.4 percentage point increase is composed of a 9.1 percentage point increase in the Prior Accident Year loss ratio, coupled with a 0.9 percentage point increase in the Current Accident Year loss ratio, and a 6.4 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.

May 2017	Actual	Projection	Difference	Difference %
Premiums Written	2,082	1,938	144	7.4%
Premiums Earned	1,398	1,415	(17)	(1.2%)
Reported Losses				
Paid Losses	768	715	53	7.4%
Paid Expenses	36	24	12	50.0%
Change in Outstanding Losses	308	10	298	>999.9%
Total Reported Losses	1,112	749	363	48.5%
Change in IBNR Provision *	404	668	(264)	
Change in Premium Deficiency (DPAC) *	137	41	96	

(Amounts in \$000's)

Rounding differences may occur.

* Detailed information is included at [Nova Scotia RSP May 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.

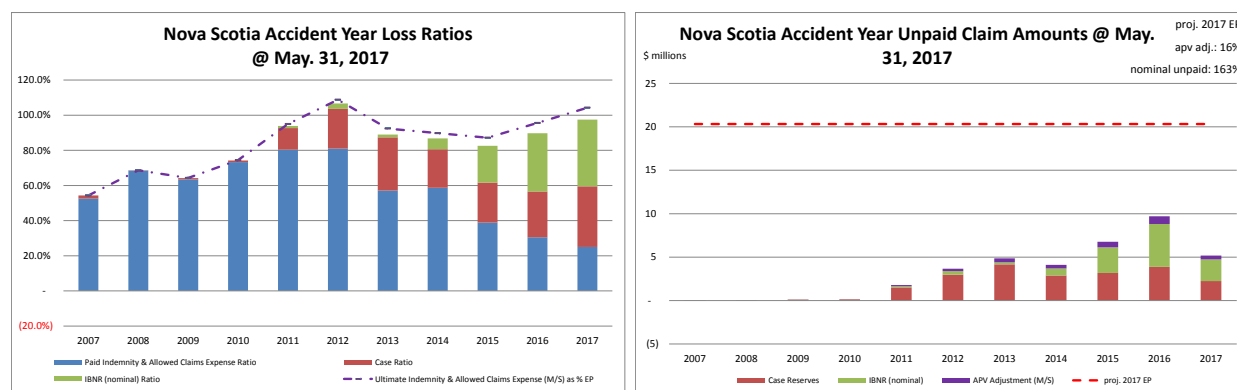
For the month of May 2017, reported losses were \$0.4 million higher than projected. The Current Accident Year had a \$325 thousand unfavourable variance in reported losses, and the Prior Accident Years had a \$37 thousand unfavourable variance. No single Prior Accident Year had a reported loss variance in excess of \$1.0 million.

Effect of Quarterly Valuation

The May 2017 Nova Scotia Risk Sharing Pool Operational Report reflects the results of an updated valuation as at March 31, 2017, with the associated impacts in relation to the results for May 2017 summarized in the table immediately below.

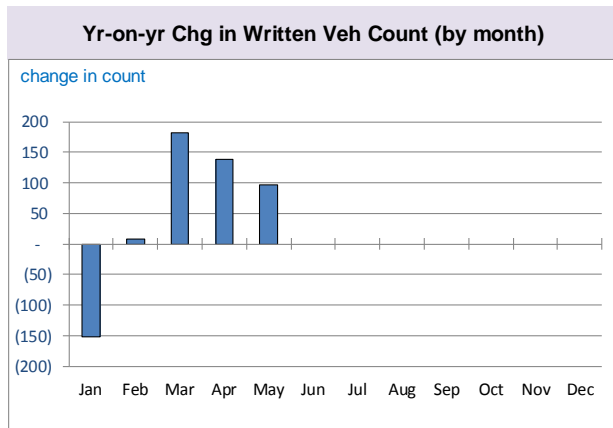
NS	unfav / (fav) for the month and ytd						mth EP 1,398 (actual)					
	IMPACT in \$000s from changes in:						IMPACT unfav / (fav) as % mth EP from changes in:					
	ults & payout patterns			dsct rate	margins		ults & payout patterns			dsct rate	margins	
	Nominal	apv adj.	sub-tot	apv adj.	apv adj.	TOTAL	Nominal	apv adj.	sub-tot	apv adj.	apv adj.	TOTAL
	[1]	[2]	[3]	[4]	[5]	[6]	[1]	[2]	[3]	[4]	[5]	[6]
PAYs	(18)	(1)	(19)	63	-	44	(1.3%)	(0.1%)	(1.4%)	4.5%	-	3.1%
CAY	59	8	67	10	-	77	4.2%	0.6%	4.8%	0.7%	-	5.5%
Prem Def	62	3	65	19	-	84	4.4%	0.2%	4.6%	1.4%	-	6.0%
TOTAL	103	10	113	92	-	205	7.4%	0.7%	8.1%	6.6%	-	14.7%

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.

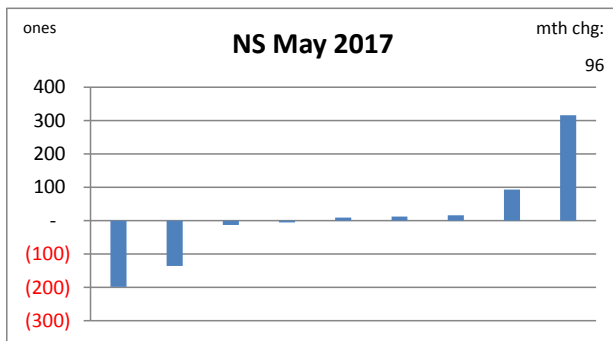


The preceding charts, latest valuation results, and related actuarial present value assumption updates are discussed in more detail in the [Nova Scotia RSP May 2017 Operational Report – Actuarial Highlights](#) and in the [Actuarial Quarterly Valuation Highlights Risk Sharing Pools as at March 31, 2017](#). The actuarial valuation will be updated next as at June 30, 2017 and we anticipate the results will be reflected in the August 2017 Operational Report.

Management Comments

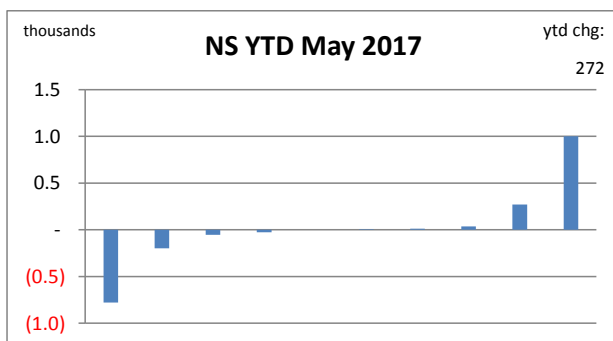


The chart on the left shows the year-on-year change in the vehicles transferred to the pool by month, with May showing an increase of 96 vehicles. Our projection last month (in part based on previous projections provided by select member company groups) was for an increase of 184 vehicles, indicating a variance of 88 from the actual transfers. This variance was mainly due to one member company group transferring a lower number of vehicles to the pool in May than projected.



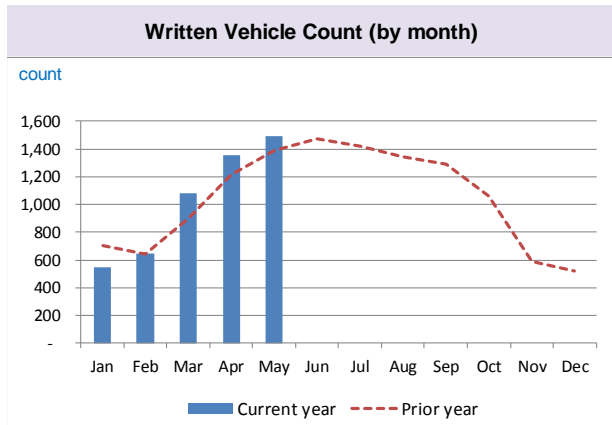
The chart on the left shows the overall change in the **month**, broken down by member company group changes (each blue bar represents the change for a single member company group), sorted by magnitude of change. Four member company groups transferred fewer vehicles to the pool this month compared with a year ago, while five transferred more. Of the 4 member company groups transferring fewer vehicles, 2 member

company groups accounted for 95% of the total transfer decrease for these “decliner” members. Of the 5 member company groups transferring more vehicles, 1 member company group accounted for 71% of the total transfer increase for these “grower” members.

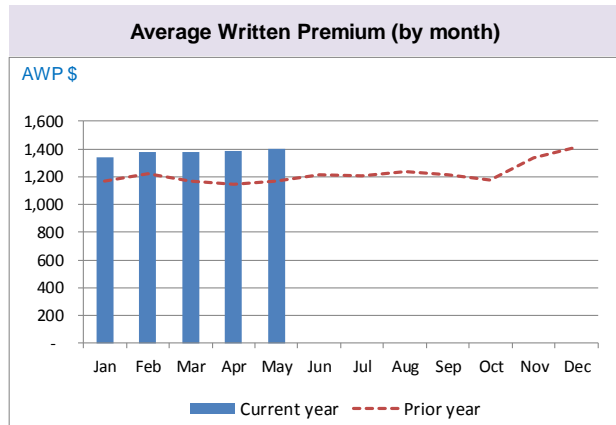


The chart on the left presents the same information as the previous chart, but on a **year-to-date** basis. That is, it shows the overall change in transfer counts year-to-date, broken down by member company group changes (each blue bar represents the change for a single member company group), sorted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

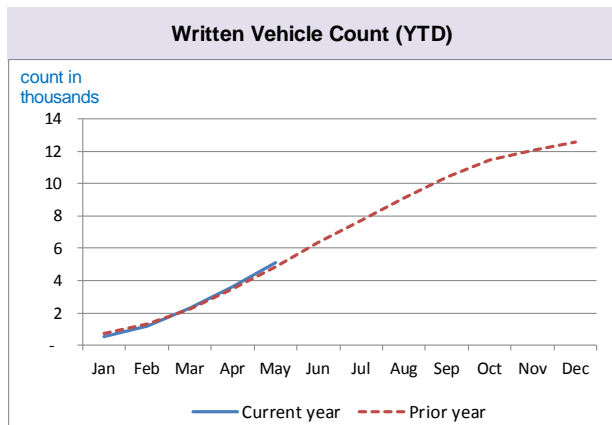
May’s vehicle count transfers to the pool represent a 6.9% increase from May 2016, and vehicle counts were up 5.6% year-to-date. Average written premium was up 19.4% in May 2017, and was up 18.1% year-to-date (see charts at the top of the next page).



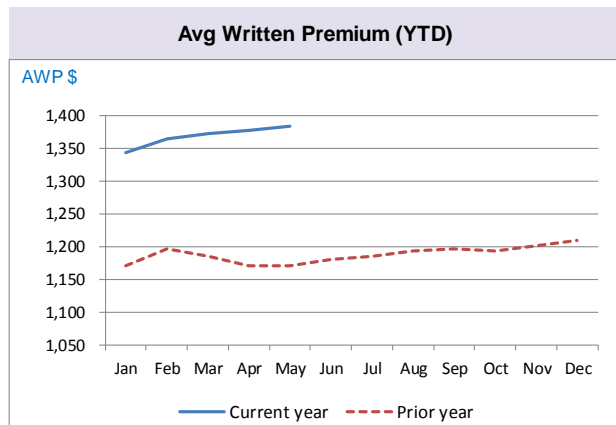
	May-17	May-16	Amt Chg	% Chg
W. Veh curr mth	1,489	1,393	96	6.9%



	May-17	May-16	Amt Chg	% Chg
AWP curr mth	1,398	1,171	227	19.4%



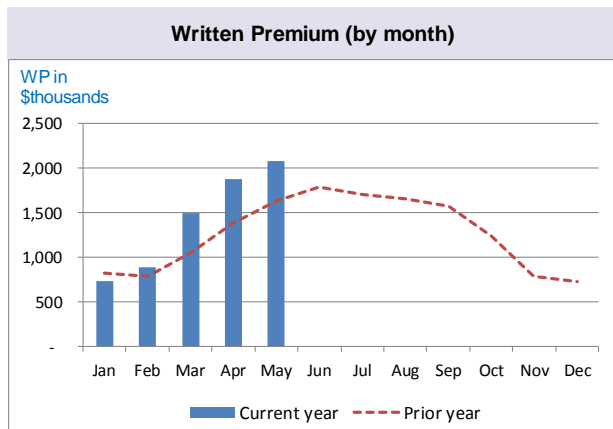
	May-17	May-16	Amt Chg	% Chg
W. Vehicles YTD	5,124	4,851	272	5.6%



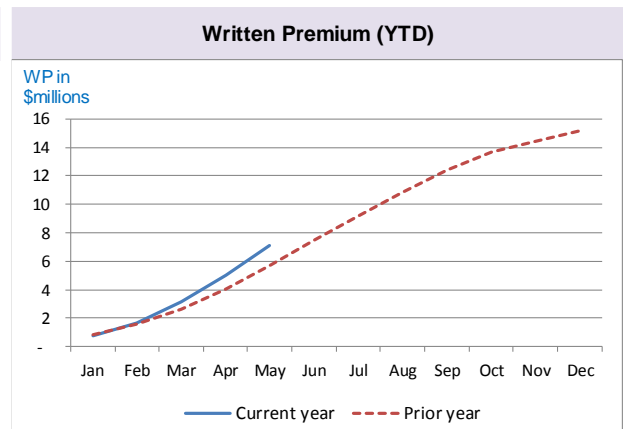
	May-17	May-16	Amt Chg	% Chg
Avg W. Prem YTD	1,383	1,171	212	18.1%

As a result of the movements in transfer vehicle counts and average written premium, the transferred premium was up 27.7% for the month compared with the 18.8% increase we projected last month (based in particular on a significant increase in transfers projected by one member), and was up 24.7% year-to-date (see charts at the top of the next page).

Bulletin F17-046
Nova Scotia Risk Sharing Pool – May 2017 Operational Report



	May-17	May-16	Amt Chg	% Chg
WP (\$000s) curr mth	2,082	1,631	451	27.7%



	May-17	May-16	Amt Chg	% Chg
WP (\$000s) YTD	7,085	5,681	1,404	24.7%

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 May 2017 Operational Report – Actuarial Highlights](#)

[Actuarial Quarterly Valuation Highlights Risk Sharing Pools as at March 31, 2017](#)

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

SUMMARY OF OPERATIONS - CALENDAR YEAR 2017

Risk Sharing Pool - Nova Scotia

Operating Results for the 5 Months Ended May 31, 2017 (Discounted basis)

Source: Monthly Operational Report

(thousands of dollars)

EXHIBIT 1

	January	February	March	April	May	CY2017 YTD	CY2017 12 MONTHS Updated Projection	CY2016 12 MONTHS Actual
Underwriting Revenue:								
Net Premiums Written	\$739	\$895	\$1,493	\$1,876	\$2,082	\$7,085	\$30,185	\$15,184
Decrease (Increase) in Unearned Premiums	529	241	(193)	(566)	(684)	(673)	(9,860)	(383)
Net Premiums Earned	\$1,268	\$1,136	\$1,300	\$1,310	\$1,398	\$6,412	\$20,325	\$14,801
Claims Incurred:								
Prior Accident Years:								
Undiscounted	(\$35)	(\$36)	(\$1,321)	(\$9)	(\$27)	(\$1,428)	(\$1,428)	\$441
Effect of Discounting	(88)	(47)	(566)	(42)	12	(731)	(1,135)	(1,075)
Discounted	(\$123)	(\$83)	(\$1,887)	(\$51)	(\$15)	(\$2,159)	(\$2,563)	(\$634)
Current Accident Year:								
Undiscounted	\$1,272	\$1,146	\$1,252	\$1,274	\$1,418	\$6,362	\$19,913	\$14,225
Effect of Discounting	117	93	52	77	113	452	1,349	1,155
Discounted	\$1,389	\$1,239	\$1,304	\$1,351	\$1,531	\$6,814	\$21,262	\$15,380
Claims Incurred	\$1,266	\$1,156	(\$583)	\$1,300	\$1,516	\$4,655	\$18,699	\$14,746
Underwriting Expenses:								
Expense Allowance	\$225	\$274	\$461	\$581	\$645	\$2,186	\$9,346	\$5,288
Change in UPDR/DPAC:								
Undiscounted	5	5	(73)	(2)	60	(5)	(3)	(184)
Effect of Discounting	(50)	(22)	(99)	48	77	(46)	724	(22)
Discounted	(\$45)	(\$17)	(\$172)	\$46	\$137	(51)	\$721	(\$206)
Underwriting Expenses	\$180	\$257	\$289	\$627	\$782	\$2,135	\$10,067	\$5,082
Net Underwriting Gain (Loss)	(\$178)	(\$277)	\$1,594	(\$617)	(\$900)	(\$378)	(\$8,441)	(\$5,027)
Administrative Expenses	\$46	\$61	\$45	\$51	\$62	\$265	\$1,071	\$474
Operating Result	(\$224)	(\$338)	\$1,549	(\$668)	(\$962)	(\$643)	(\$9,512)	(\$5,501)
Ratios:								
Claims & Expenses Incurred (Earned)								
Prior Accident Years	-9.7%	-7.3%	-145.2%	-3.9%	-1.1%	-33.7%	-12.6%	-4.3%
Current Accident Year	109.5%	109.1%	100.3%	103.1%	109.5%	106.3%	104.6%	103.9%
All Accident Years Combined	99.8%	101.8%	-44.9%	99.2%	108.4%	72.6%	92.0%	99.6%
Underwriting & Administrative Expenses (Earned)	17.8%	28.0%	25.7%	51.8%	60.4%	37.4%	54.8%	37.5%
Combined Operating Ratio	117.6%	129.8%	-19.2%	151.0%	168.8%	110.0%	146.8%	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