

New Brunswick Risk Sharing Pool April 2021 Operational Report Actuarial Highlights

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ACTUARIAL HIGHLIGHTS

RSP New Brunswick

OPERATIONAL REPORT

APRIL 2021

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1 Summary

Note to members: we are currently reviewing our member reporting requirements and intend to provide the **Actuarial Highlights quarterly instead of the current monthly reporting**, starting with the May 2021 operational reporting and aligned with the valuation schedule; please contact us with any questions or concerns in regards to this matter.

1.1 Valuation Schedule (Fiscal Year 2021)

The April 2021 Operational Report leverages actuarial assumptions consistent with last month (that is, it does not reflect the results of an updated valuation). The following table summarizes the valuation implementations scheduled for fiscal year 2021.

	New Brunswick Risk Sharing Pool Fiscal Year 2021 — Schedule of Valuations									
Valuation Date	Discount Rate (per annum)	Operational Report	Description of Changes							
Sep 30, 2020 (completed)	0.22% mfad ¹ 25 bp	Oct. 2020	update valuation (roll-forward):): accident year 2020 loss ratio <u>de</u> creased 0.1 points to 65.2%; discount rate <u>de</u> creased 3 basis points; no change to selected margins for adverse deviations							
Dec. 31, 2020 (completed)	0.26% mfad 25 bp	Mar. 2021	update valuation: accident year 2020 loss ratio decreased 6.0 points to 59.2% and accident year 2021 loss ratio decreased 6.5 points to 70.1%;; discount rate increased 4 basis points; no change to selected margins for adverse deviations							
Mar. 31, 2021	% mfad bp	May 2021	update valuation (roll-forward):							
Jun. 30, 2021	% mfad bp	Aug. 2021	update valuation:							
Sep. 30, 2021	% mfad bp	Oct. 2021	update valuation (roll-forward):							

Under the proposed schedule for fiscal year 2021, the off-half valuation quarters ending March 31, 2021 and September 30, 2021 would not reflect a full valuation update of assumptions, but would rather roll-forward key assumptions from the previous valuation.

1.2 Appointed Actuary and Hybrid Actuarial Services Model

The Annual General Meeting of the members of Facility Association ("FA") appointed Mr. Cosimo

¹ The selected interest rate margin is limited to reducing the selected discount rate to 0%; the approach is that if the net impact is negative, the discount rate will be capped at 0%.



Pantaleo as the Appointed Actuary at its meeting on March 4, 2021.

Facility Association operates under a hybrid model in relation to the management and provision of actuarial services. Under this model, actuarial services are performed by both Facility Association's internal staff and its external actuarial consulting firm. The hybrid model approach maximizes the efficiency of resource allocation while providing access to additional expertise and capacity as needed.

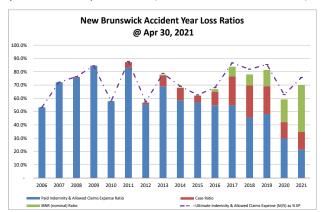
1.3 Consideration of Recent Legal Decisions and Changes in Legislation / Regulation

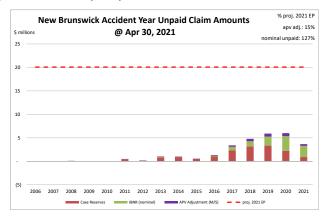
There have been no changes in these descriptions since last month's Highlights.

Consideration and assessment of potential impacts of legal decisions and changes in legislation / regulation constitutes a regular part of the valuation process. At the current time, there are no specific recent (i.e. within the last five years) decisions or changes for inclusion here.

1.4 Current Provision Summary

The following charts show the current levels of claim liabilities² booked by accident year. The left chart displays life-to-date payments, case reserves, IBNR, and the total including actuarial present value adjustments against accident year earned premium. The right chart shows the associated dollar amounts for the components of the claim liabilities and the current projected amount of 2021 full year earned premium (the red hash-mark line) to provide some perspective.





"M/S" refers to "Member Statement" values – that is, actuarial present value adjustments at the selected discount rate.

The current actuarial present value adjustments balance (\$2.9 million – see the following table) represents 15% of the earned premium projected for the full year 2021 (see the upper right corner of the right chart above). If our current estimates of the nominal unpaid amounts prove to match actual claims payments, the actuarial present value adjustments will be released into the net operating result over future periods.

²Claim liabilities refer to provision for unpaid indemnity and allowed claims expenses. Allowed claims expenses are first party legal and other expenses as listed in the RSP Claims Guide. Claims expenses paid through the member company expense allowance are NOT included in this discussion.



claim liabilities (\$000s)		
	amt	%
case	15,920	55.9%
ibnr	9,622	33.8%
M/S apv adjust.	2,930	10.3%
M/S total	28,472	100.0%

The table to the left breaks down the Member Statement (M/S) claim liabilities total into component parts, showing that the majority of the claim liabilities for this RSP is in case reserves. Approximately 57% of the IBNR balance relates to accident years 2020 and 2021 (see Exhibit B). Approximately 83% of the M/S

total claim liabilities are related to accident years 2017-2021 inclusive (i.e. the most recent 5 accident years), and approximately 2% is related to accident years 2011 and prior (i.e. prior to the most recent 10 accident years).

The following tables summarize the premium liabilities and the total policy liabilities.

premium liabilities (\$0)00s)		policy liabilities (\$000s)						
	amt	%		amt	%				
unearned prem	9,944	124.9%	claim	25,542	70.1%				
prem def/(dpac)	(2,646)	(33.2%)	premium	7,298	20.0%				
M/S apv adjust.	664	8.3%	M/S apv adjust.	3,594	9.9%				
M/S total	7,962	100.0%	M/S total	36,434	100.0%				

2 Activity During the Month of April 2021

2.1 Recorded Premium and Claims Activity

The following table summarizes the extent to which premiums and claims amounts recorded during the month differ from projections reflected in the prior month's Operational Report³.

New Brunswick RSP Actual vs Projected Summary: Recorded Transaction Amounts (\$ thousands)

Table 01	Earned P	remium		emnity & ims Expense	Case in (decr	crease / ease)	Recorded increase / (decrease)		
Accident	Actual less		Actual less Actual less		Actual less Actual less Actual		Actual less		Actual less
Year	Actual	Projected	Actual	Projected	Actual	Projected	Actual	Projected	
Prior	(3)	(3)	47	(162)	279	412	326	250	
2019	(3)		36	(17)	34	37	70	20	
2020	(5)	(5)	48	(114)	57	187	104	72	
2021	1,715	108	493	29	225	(54)	718	(25)	
TOTAL	1,705	98	623	(265)	594	582	1,218	317	

(Recorded transaction amounts exclude IBNR & other actuarial provisions)

Claims transaction activity is generally volatile and changes from one month to the next are anticipated due to this natural "process variance" (i.e. random variation), and this is particularly true where volumes are low as found in this RSP. Each month, the projection variances are reviewed for signs of projection bias and to identify potential ways to reduce the level of the variance. Commentary from our review is provided in the sub-sections that follow.

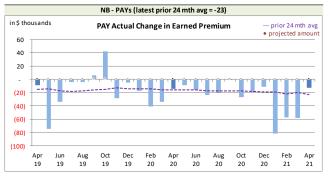
³There may be rounding differences in values in this document compared with the associated Bulletin and/or Operational Report.

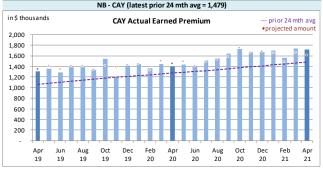


2.1.a Actual vs. Projected (AvsP): Earned Premium

The following charts show actual **earned premium**⁴ activity in each of the most recent 25 calendar months, along with a "prior 24-month average" to show how each month's actual compares with the average amount of the preceding 24 calendar months.

New Brunswick RSP Actual Earned Premium by Calendar Month





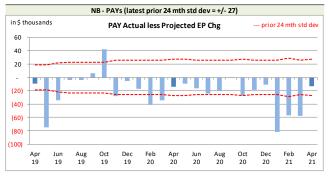
Earned premium changes during a given calendar month in relation to prior accident years tend to be at modest levels, although relatively high levels generally occur at the beginning of each year.

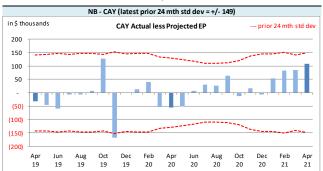
On Latest \$ thousands							
Earned Premium	PAYs	CAY					
Mthly Avg EP Chg (prior 24 mths)	(23)	1,479					
std dev	27	149					
A-P <> std dev	9	1					
% <> std dev	36.0%	4.0%					
norm <> std dev	31.7%	31.7%					
performance vs 24-mth avg:	no better	better					

The associated variance between the actual changes and the projections from the previous month are shown in following charts. **Earned premium** change projections are all attributed to the current accident year as the projection upload does not accept **earned premium** changes for other accident years. We do not see this limitation as being significant for our purposes, but it does

mean that the actual less projection variance will equal the actual **earned premium** change in relation to prior accident years.

New Brunswick RSP Actual vs. Projected Summary: Earned Premium Variances by Calendar Month





We project earned premium changes from known unearned premium balances and projected

⁴Premium is earned on a daily basis based on the transaction term measured in days. As a result, months with 31 days earned relatively more than those with 30 days, and February earns the least.



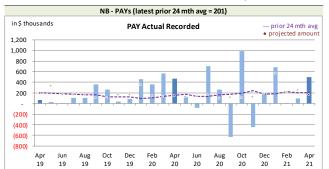
written premium levels, but upload the total projections as current accident year (CAY). This process has generated prior accident years' (PAYs) bias⁵, with actuals generally lower than our projections, although the magnitude is not high relative to monthly premium. However, for the CAY, bias⁶ has not been indicated. Over time, we may consider other projection approaches to address the bias issue, but it is not currently deemed as priority.

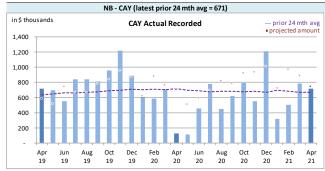
Readers will note the widening of the CAY standard deviation band, reflecting the recent and sustained volume increases and the impact as those increases are earned.

2.1.b AvsP: Recorded Indemnity & Allowed Claims Expense

The following charts show actual **recorded** activity (**paid** and case reserve changes), in each of the most recent 25 calendar months, along with a "prior 24-month average" to show how each month's actual compares with the average amount of the preceding 24 calendar months.

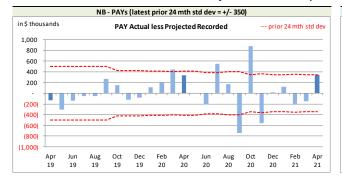
New Brunswick RSP Actual Recorded by Calendar Month

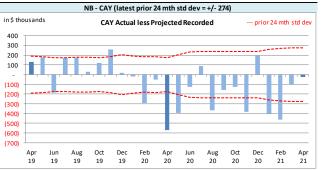




Recorded activity variances from the previous month's projections are shown in the following charts, including the "prior 24-month standard deviation" levels to show how the variances from projection compare with historical standard deviations.

New Brunswick RSP Actual vs Projected Summary: Recorded Variances by Calendar Month





⁵The PAYs' variances will show bias as the projection upload forces all earned premium projections to be attributed to the CAY.

⁶For the binomial distribution with 25 trials and an assumed 50% success probability, the 95% confidence range is 8 to 17 successes. That is, favourable or unfavourable counts of 0 to 7 or 18 to 25 out of 25 outcomes would suggest bias.



On Latest \$ thousands							
Recorded	PAYs	CAY					
Mthly Avg Recorded (prior 24 mths)	201	671					
std dev	350	274					
A-P <> std dev	5	9					
% <> std dev	20.0%	36.0%					
norm <> std dev	31.7%	31.7%					
performance vs 24-mth avg:	better	no better					

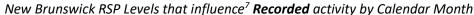
With respect to **recorded** indemnity & allowed claims expense activity, caution must be exercised in reviewing the variances as this is a small pool and single claim transactions that are normal course for the business may look unusual and generate relatively significant variances that in nominal value terms are not that significant in

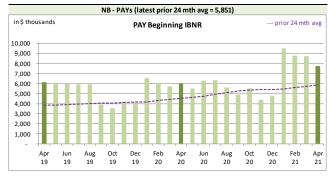
relative or overall terms. That said, 20% of the prior accident years' (PAYs) **recorded** variances over the last 25 calendar months have fallen outside of one standard deviation of the actual **recorded** amounts (see preceding table to the left), suggesting the projection process has performed better than simply projecting the prior 24-month average amount (assuming it follows a normal distribution). Bias has not been indicated at a 95% confidence level on a rolling 25-month basis (13 of 25 variances are positive).

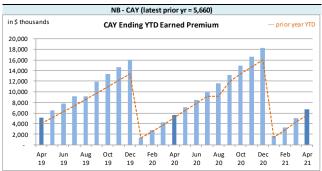
The current accident year (CAY) **recorded** variances fell outside of one standard deviation 36% of the time over the last 25 calendar months (see preceding table on the left), suggesting the projection process has performed no better than simply projecting the prior 24-month average amount. Bias has not been indicated at a 95% confidence level on a rolling 25-month basis (10 of 25 variances are positive).

The method for establishing IBNR adjusts automatically for changes in **earned premium** and **recorded** claims activity level (see sections 2.2 and 3).

We have included, for reference, the following charts related to levels influencing **recorded** activity. Note in particular the increase in the level of PAY beginning IBNR over the months. Part of this will be as a response to valuations and showing up as a beginning IBNR change one month after the valuation is implemented (i.e. April, June, September, and November).

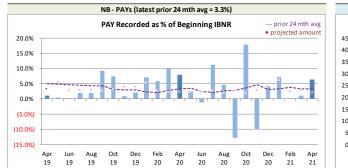


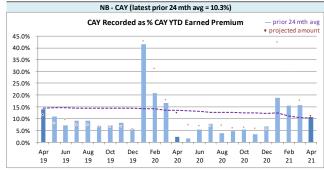




⁷Our recorded activity projections for the prior accident years are based on selected ratios of recorded activity to beginning unpaid balances, whereas the current accident year projections are based on selected ratios of year-to-date IBNR to year-to-date selected ultimate (i.e. selected LR x earned premium), deriving year-to-date recorded as selected ultimate less IBNR. In both cases, the ratio selection is based on our review of the more recent recorded activity and recent AvsP analyses.







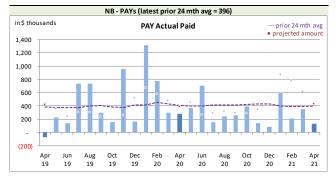
We track PAY beginning IBNR as **recorded** activity comes out of IBNR. Changes in the PAY beginning IBNR (see upper left of the preceding group of charts) occur for several possible reasons:

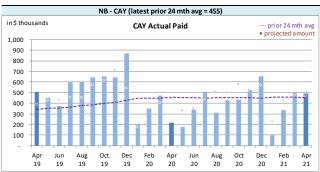
- to offset actual recorded activity (through loss ratio matching);
- the annual switchover as a CAY becomes a PAY (occurs in January); and
- when a new valuation is implemented, where the valuation resulted in changes to the selection of PAYs' ultimates (will show up as a beginning IBNR change one month after the valuation is implemented, i.e. the change will generally show in April, June, September, and November).

2.1.c AvsP: Paid Indemnity & Allowed Claims Expense

The following charts show actual **paid** activity in each of the most recent 25 calendar months, along with a "prior 24-month average" to show how each month's actual compares with the average amount of the preceding 24 calendar months.

New Brunswick RSP Actual Paid activity by Calendar Month

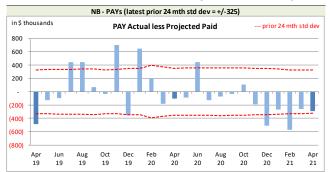


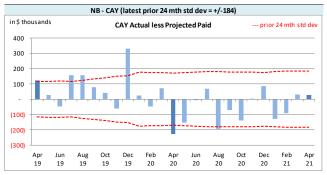


Paid activity variances from the previous month's projections are shown in the following charts, including the "prior 24-month standard deviation" levels to show how the variances from projection compare with historical standard deviations.



New Brunswick RSP Actual vs Projected Summary: Paid Variances by Calendar Month





On Latest \$ thousands									
Paid	PAYs	CAY							
Mthly Avg Paid (prior 24 mths)	396	455							
std dev	325	184							
A-P <> std dev	9	6							
% <> std dev	36.0%	24.0%							
norm <> std dev	31.7%	31.7%							
performance vs 24-mth avg:	no better	better							

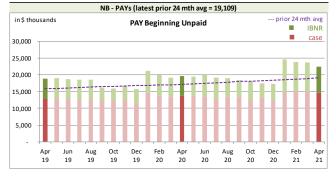
With respect to **paid** indemnity & allowed claims expense, caution must be exercised in reviewing the variances as this is a small pool, and single claim transactions that are normal course for the business may look unusual and generate relatively significant variances that in nominal value terms are not that significant in relative or overall terms.

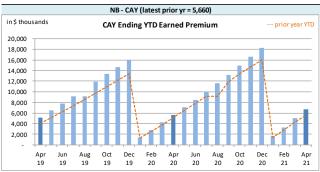
That said, 36% of the prior accident years' (PAYs) variances over the last 25 calendar months have fallen outside of one standard deviation of the actual **paid** amounts (see preceding table on the left), suggesting the projection process has performed no better than simply projecting the prior 24-month average amount (assuming a normal distribution). Bias has not been indicated at a 95% confidence level on a rolling 25-month basis (8 of 25 variances are positive).

The current accident year (CAY) **paid** variances fell outside of one standard deviation 24% of the time over the last 25 calendar months (see preceding table on the left), suggesting that the projection process has performed better than simply projecting the prior 24-month average amount. Bias has not been indicated at a 95% confidence level on a rolling 25-month basis (14 of 25 variances are positive).

We have included, for reference, the following charts related to levels influencing paid activity.

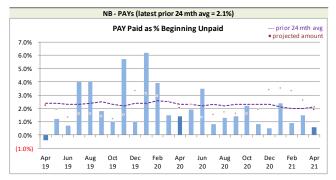
New Brunswick RSP Levels that influence8 Paid activity by Calendar Month

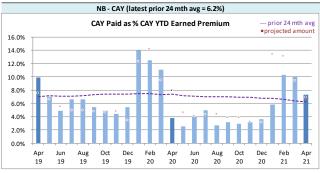




⁸Our paid projections for the prior accident years are based on selected ratios of paid to beginning unpaid balances, whereas the current accident year projections are based on selected ratios of year-to-date paid to year-to-date selected ultimate indemnity (i.e.







We track the PAY beginning unpaid balance (case and IBNR) as **paid** activity comes out of the unpaid balance. Changes in the PAY beginning unpaid balance (see upper left of the preceding group of charts) occur for several possible reasons:

- to offset actual paid activity (may reduce case or IBNR or both);
- the annual switchover as a CAY becomes a PAY (occurs in January); and
- when a new valuation is implemented, where the valuation resulted in changes to the selection of PAYs' ultimates (will show up as a beginning unpaid balance change one month after the valuation is implemented, i.e. the change will generally show in April, June, September, and November).

2.2 Actuarial Provisions

An ultimate loss ratio matching method (described in section 3) was used to determine the month's IBNR⁹, and factors were applied to the nominal unpaid claims liability (case plus IBNR) to determine the discount amount (shown as a negative value to indicate its impact of reducing the liability) and the Provisions for Adverse Deviations. The loss ratios and the factors used to determine the current month's provisions and projections were based on the applicable valuation.

The following table summarizes variances in provisions included in this month's Operational Report and the associated one-month projections from last month's Report.

selected LR x earned premium). In both cases, the ratio selection is based on our review of the more recent recorded activity and recent AvsP analyses.

⁹For ease of discussion, "IBNR" is used in place of "provisions for incurred but not recorded (IBNR) and development".



New Brunswick RSP Actual vs Projected Summary: IBNR and APV Amounts (\$ thousands)

Table 02			actua	arial present v							
	IBNR		IDNID		IBNR Discount Amount		Provisions	for Adverse	IBNR + actuarial present		
			Discount	Amount	Devia	ations	value adjustments				
Accident	Actual	cual Actual less Actual Projected Actual Projected		Actual less	Actual	Actual less	Actual	Actual less			
Year	Actual			Projected	Actual	Projected	Actual	Projected			
Prior	2,214	(254)	(71)	(2)	1,334	20	3,477	(236)			
2019	1,924	(22)	(42)	-	688	2	2,570	(20)			
2020	3,106	(75)	(48)	(1)	695	15	3,753	(61)			
2021	2,378	101	(29)	-	403	6	2,752	107			
TOTAL	9,622	(250)	(190)	(3)	3,120	43	12,552	(210)			

The IBNR provision is \$0.3 million lower than projected from last month, counterbalancing the recorded claims activity and adjusting for the earned premium variance impacts indicated in section 2.1, .

Exhibit G shows the accident year IBNR amount change from last month to this month broken down into:

- (i) the change projected last month;
- the additional change due to variances in earned premium (because we apply a loss ratio to earned premium in determining ultimate level) and/or recorded claims (as IBNR is calculated as ultimate less recorded) differences; and
- (iii) the additional change due to valuation implementation impacts (as applicable)

The variances associated with (ii) above are discussed in sections 2.1.a and 2.1.b.

The following table summarizes the variances in the provisions for premium deficiency liability / (deferred policy acquisition cost asset) included in this month's Operational Report and the one-month projections from last month's Report. This RSP is in a deferred policy acquisition cost asset position (shown as a negative amount) prior to and after actuarial present value adjustments. Actuarial present value adjustments decrease the asset value as the adjustments increase the expected future policy obligations (costs) associated with the unearned premium. The variances noted are mainly driven by the unearned premium variance.



New Brunswick RSP Actual vs Projected Summary: Premium Deficiency / (DPAC) Amounts (\$ thousands)

Table 03	Premium D (Deferre Acquisitio	d Policy	l .	esent value ments	Premium Deficiency / (DPAC) including actuarial present value adjustments	
	Actual	Actual less	Actual	Actual less	Actual	Actual less
		Projected		Projected		Projected
balance:	(2,646)	(34)	664	10	(1,982)	(24)
balance as % unearned premium:	(26.6%)	-	6.7%	0.1%	(19.9%)	0.1%

actual unearned premium: 9,944 less projected: 142

3 Ultimate Loss Ratio Matching Method

An "ultimate loss ratio matching method" continues to be applied to the current month and two projected months shown in the Operational Reports, with IBNR determined by accident year as follows:

- (a) Earned premium to-date
- (b) Ultimate loss¹⁰ ratio per latest valuation
- (c) Estimated ultimate incurred = (a) x (b)
- (d) Recorded indemnity & allowed claims expense to-date
- (e) IBNR = (c) (d)

4 Calendar Year-to-Date Results

The following table summarizes the calendar year-to-date results for indemnity & allowed claims expenses¹¹, including IBNR.

In calculating the amounts as percentages of earned premium, the calendar year-to-date earned premium has been used, which includes not only the earned premium associated with the current accident year, but also earned premium adjustments related to prior accident years. Specifically, the current accident year (CAY) ratio in the table is 72.4% rather than 70.1% (the valuation ultimate ratio for accident year 2021), as the calendar year-to-date earned premium includes prior accident year earned premium adjustments. (Note that the ratios in this table may differ slightly from those shown in the New Brunswick RSP Summary of Operations due to rounding.)

¹⁰"Loss" here refers to indemnity and allowed claims expenses, but does not include the claims expense allowance included in member company overall expense allowances ("Expense Allowance" in the Operational Report).

¹¹Allowed claims expenses are first party legal and other expenses as listed in the RSP Claims Guide. Claims expenses paid through the member company expense allowance are NOT included in this analysis.



New Brunswick RSP Calendar Year-to-Date Indemnity & Allowed Claims Expense Summary (\$ thousands)

Table 04	YTD Nominal Values		lues YTD actuarial present value adjustment		YTD To	tal	Change from Prior Month YTD	
	Amount	% EP	Amount	% EP	Amount	% EP	Amount	LR pts
PAYs	(976)	(15.0%)	(182)	(2.8%)	(1,158)	(17.8%)	(26)	5.8%
CAY	4,704	72.4%	374	5.8%	5,078	78.1%	1,285	(1.0%)
TOTAL	3,728	57.4%	192	3.0%	3,920	60.3%	1,259	4.8%

("% EP" based on 2021 calendar year-to-date earned premium; ratios may not total due to rounding)

In general, prior accident years (PAYs) changes from last month are due to the release of the actuarial present value adjustments with claims payments, except when valuations are implemented. The loss ratio change year-to-date in Table 04 reflects not only changes in the prior accident year levels, but also the increase in the calendar year-to-date earned premium with an additional month's earned premium.

For the current accident year (CAY), changes in the year-to-date total reflects the additional month's exposure and regular changes to actuarial present value adjustments as the year ages.

5 Current Operational Report – Additional Exhibits

Section 6 provides exhibits pertaining to the actuarial provisions reflected in the current month's Operational Report.

IBNR (including actuarial present value adjustments) presented in section 6, Exhibit A, were derived on a discounted basis, and therefore reflect the time value of money and include an explicit provision for adverse deviations in accordance with accepted actuarial practice in Canada.

IBNR presented in section 6, Exhibit B, does NOT include any actuarial present value adjustments. The "Total IBNR" from this exhibit is shown in the Operational Report as "Undiscounted IBNR".

The ultimate loss ratios detailed in section 6, Exhibit B, refer to the estimates derived on the basis of various actuarial methodologies applied to the experience of the New Brunswick Risk Sharing Pool for the purposes of the most recent quarterly valuation. As discussed in section 3, IBNR reflected in the current month's Operational Report was derived as the difference between the estimated ultimate for the claims amount (i.e. earned premium x ultimate loss ratio) and the associated current recorded amounts (life-to-date payments plus current case reserves).



6 **EXHIBITS**

The exhibits listed below are provided on the pages that follow:

EXHIBIT A	BNR fo	or Memb	er Sł	naring –	includ	es Actı	ıarial	Present	Value	Adjustmen	ts
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EXHIBIT B IBNR

EXHIBIT C Premium Liabilities

EXHIBIT D Projected Year-end Policy Liabilities

EXHIBIT E Discount Rate & Margins for Adverse Deviations

EXHIBIT F Interest Rate Sensitivity

EXHIBIT G Components of IBNR Change During Month



EXHIBIT A

IBNR for Member Sharing – includes Actuarial Present Value Adjustments

TABLE EXHIBIT A	Amounts in \$000s										
IBNR + M/S actuarial present	Accident	Actual	Actual	Projected	Projected	Projected	Projected	Projected	Projected		
value adjustments	Year	Mar. 2021	Apr. 2021	May. 2021	Jun. 2021	Jul. 2021	Aug. 2021	Sep. 2021	Dec. 2021		
	2006	-	-	-	-	-	-	-	-		
	2007	6	6	6	6	6	6	6	6		
	2008	12	12	12	12	12	11	11	11		
	2009	6	6	6	6	6	6	6	6		
	2010	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)		
	2011	57	56	53	53	52	50	50	48		
	2012	50	50	47	46	44	42	42	40		
	2013	167	167	158	155	153	146	144	137		
	2014	118	116	110	108	107	102	102	98		
	2015	171	66	63	63	62	60	59	58		
discount rate	2016	305	310	292	284	280	264	261	249		
0.26%	2017	1,112	1,081	1,054	1,043	997	987	974	885		
	2018	1,813	1,611	1,573	1,557	1,527	1,512	1,498	1,363		
interest rate margin	2019	2,647	2,570	2,506	2,408	2,366	2,343	2,319	2,118		
25 basis pts	2020	3,866	3,753	3,702	3,640	3,568	3,437	3,373	3,091		
	2021	2,185	2,752	3,399	4,015	4,252	4,394	4,453	4,372		
	TOTAL	12,511	12,552	12,977	13,392	13,428	13,356	13,294	12,478		
	Change		41	425	415	36	(72)	(62)			

Please see Exhibit G, page 1 for Components of Change during Current Month

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Change

EXHIBIT B

IBNR

TABLE EXHIBIT B		Amounts in \$000s										
	-											
IBNR	Ultimate	Accident	Actual	Actual	Projected	Projected	Projected	Projected	Projected	Projected		
	Loss Ratio	Year	Mar. 2021	Apr. 2021	May. 2021	Jun. 2021	Jul. 2021	Aug. 2021	Sep. 2021	Dec. 2021		
	53.2%	2006	-	-	-	-	-	-	-	-		
	72.1%	2007	5	5	5	5	5	5	5	5		
	76.3%	2008	4	4	4	4	4	4	4	4		
	84.5%	2009	3	3	3	3	3	3	3	3		
	57.8%	2010	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)		
	87.4%	2011	11	11	10	10	10	9	9	9		
	57.1%	2012	32	32	30	29	28	26	26	25		
	77.9%	2013	75	75	70	68	67	62	61	57		
	68.1%	2014	26	24	22	21	21	19	19	18		
	62.1%	2015	117	13	12	12	12	11	11	11		
	66.9%	2016	185	190	177	171	168	155	153	145		
	83.8%	2017	803	774	751	743	700	693	683	611		
	77.9%	2018	1,287	1,087	1,054	1,043	1,022	1,012	1,002	897		
	81.4%	2019	1,996	1,924	1,866	1,775	1,739	1,722	1,705	1,540		
	59.2%	2020	3,213	3,106	3,075	3,026	2,965	2,852	2,806	2,585		
	70.1%	2021	1,893	2,378	2,942	3,467	3,606	3,651	3,619	3,270		
		TOTAL	9,646	9,622	10,017	10,373	10,346	10,220	10,102	9,176		

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(24)

Please see Exhibit G, page 2 for Components of Change during Current Month

(27)

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EXHIBIT C

Premium Liabilities

TABLE EXHIBIT C	Amounts in \$000s									
Premium Liabilities	Actual Mar. 2021	Actual Apr. 2021	Projected May. 2021	Projected Jun. 2021	Projected Jul. 2021	Projected Aug. 2021	Projected Sep. 2021	Projected Dec. 2021		
		<u> </u>	· · · · · · · · · · · · · · · · · · ·				-			
(1) unearned premium (UP)	9,772	9,944	9,946	10,030	10,480	10,611	10,806	9,797		
FOR MEMBER SHARING										
(2) expected future costs ratio {% of (1)}	79.7%	80.1%	80.5%	81.1%	81.9%	82.6%	83.4%	86.3%		
(3) expected future costs {(1) x (2)}	7,787	7,962	8,008	8,135	8,578	8,766	9,014	8,455		
(4) premium deficiency / (deferred policy										
acquisition cost)	(1,985)	(1,982)	(1,938)	(1,895)	(1,902)	(1,845)	(1,792)	(1,342)		
Excluding Actuarial Present Value Adjustments										
(5) expected future costs ratio {% of (1)}	73.0%	73.4%	73.8%	74.3%	75.0%	75.7%	76.5%	79.1%		
(6) expected future costs {(1) x (5)}(7) premium deficiency / (deferred policy	7,137	7,298	7,340	7,455	7,862	8,035	8,261	7,748		
acquisition cost)	(2,635)	(2,646)	(2,606)	(2,575)	(2,618)	(2,576)	(2,545)	(2,049)		



EXHIBIT D

Projected Year-end Policy Liabilities

The table below presents the projected policy liabilities as at December 31, 2021, broken down by component.

New Brunswick	Projected Balances as at Dec. 31, 2021 (\$000s)										
ending 2021	nominal values										
Acc Yr	Case	IBNR	Total Unpaid	discount	investment PfAD	nominal development PfAD	development PfAD discount	development PfAD	Total apvs	TOTAL	
2006	-	-	-	-	-	-	-	-	-	-	
2007	-	5	5	-	-	1	-	1	1	6	
2008	67	4	71	-	-	7	-	7	7	78	
2009	26	3	29	-	-	3	-	3	3	32	
2010	-	(2)	(2)	-	-	-	-	-	-	(2)	
2011	385	9	394	(2)	2	39	-	39	39	433	
2012	127	25	152	(1)	1	15	-	15	15	167	
2013	746	57	803	(3)	3	80	-	80	80	883	
2014	784	18	802	(4)	4	80	-	80	80	882	
2015	454	11	465	(2)	2	47	-	47	47	512	
2016	907	145	1,052	(6)	6	105	(1)	104	104	1,156	
2017	2,148	611	2,759	(17)	17	276	(2)	274	274	3,033	
2018	2,886	897	3,783	(26)	26	469	(3)	466	466	4,249	
2019	3,161	1,540	4,701	(38)	38	583	(5)	578	578	5,279	
2020	1,606	2,585	4,191	(38)	38	511	(5)	506	506	4,697	
PAYs (sub-total):	13,297	5,906	19,203	(137)	137	2,216	(16)	2,200	2,200	21,403	
CAY (2021)	6,398	3,270	9,668	(87)	87	1,112	(10)	1,102	1,102	10,770	
claims liabilities:	19,695	9,176	28,871	(224)	224	3,328	(26)	3,302	3,302	32,173	
	Unearned Premium	Premium Deficiency / (DPAC)	Total Provision	discount	investment PfAD	nominal development PfAD	development PfAD discount	development PfAD	Total apvs	TOTAL*	
premium liabilities:	9,797	(2,049)	7,748	(52)	52	712	(5)	707	707	8,455	
						*	Total may not be s	um of parts, as ap	vs apply to future	costs within UPR	
policy liabilities:			36,619	(276)	276	4,040	(31)	4,009	4,009	40,628	



EXHIBIT E

Discount Rate & Margins for Adverse Deviations

The tables below present selected margins for adverse development by coverage (the total is a weighted average, based on the unpaid claims projection for December 31, 2021 from the valuation), followed by the selected discount rate and the associated margin for investment income.

Selected Claims Development MfADs (Dec. 31, 2020)

Accident	Third Party	Accident	Other	Tatal
Year	Liability	Benefits	Coverages	Total
	Margins	Margins	Margins	Margins
2005	10.0%	10.0%	10.0%	10.0%
2006	10.0%	10.0%	10.0%	10.0%
2007	10.0%	10.0%	10.0%	10.0%
2008	10.0%	10.0%	10.0%	10.0%
2009	10.0%	10.0%	10.0%	10.0%
2010	10.0%	10.0%	10.0%	10.0%
2011	10.0%	10.0%	10.0%	10.0%
2012	10.0%	10.0%	10.0%	10.0%
2013	10.0%	10.0%	10.0%	10.0%
2014	10.0%	10.0%	10.0%	10.0%
2015	10.0%	10.0%	10.0%	10.0%
2016	10.0%	10.0%	10.0%	10.0%
2017	10.0%	10.0%	10.0%	10.0%
2018	12.5%	10.0%	10.9%	12.4%
2019	12.5%	10.0%	12.5%	12.4%
2020	12.5%	10.0%	10.6%	12.2%
2021	12.3%	10.0%	5.5%	11.5%
prem liab	11.8%	10.0%	5.1%	9.5%

discount rate: 0.26% margin (basis points): 25



EXHIBIT F

Interest Rate Sensitivity

The tables below present sensitivity to the member statement claims liability as projected to Dec. 31, 2021 from the latest valuation date (projections in exhibits A to D are to Dec. 31, 2021, and are based on more up-to-date information). We have included the most recent valuation selection (0.26%), the prior valuation assumption (0.22%) and the prior fiscal year end valuation assumption (0.22%) for comparative purposes. A 25 basis point margin for investment return adverse deviation is used in all scenarios presented.

\$ Format: \$000s

	Actuar	ial Procent Va		/	Discount Bate	. D 24 20	24:	Innaid
		iai rieseiit va	lue of Provision	ons at various	DISCOURT NATE	es - Dec. 31, 20	zi projectea t	, iipaiu
AY	0.00%	0.00%	0.26%	0.76%	1.26%	1.76%	0.22%	0.22%
2005	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-
2007	-		-	-				-
2008	28	28	28	28	28	28	28	2
2009	15	15	15	15	15	15	15	1
2010	1	1	1	1	1	1	1	
2011	267	267	266	265	263	261	266	26
2012	153	153	152	151	149	148	152	15
2013	585	585	584	580	575	571	584	58
2014	679	679	678	673	667	661	679	67
2015	423	423	423	419	415	411	423	42
		971	971	960	950	940	971	
2016	971 2,847	2,847	2,845	2,810	2,776	2,744	2,846	97 2,84
				-				
2018	3,947	3,947	3,943	3,889	3,836	3,785	3,944	3,94
2019	5,084	5,084	5,078	5,000	4,923	4,849	5,080	5,08
2020	5,631	5,631	5,624	5,527	5,432	5,341	5,626	5,62
Total	20,631	20,631	20,608	20,318	20,030	19,755	20,615	20,61
	curr - 100 bp	curr - 50 bp	curr val	curr + 50bp	curr + 100bp	curr + 150bp	prior val	prior fyr en
			assumption				assumption	assumptio
			Dollar Imp	act Relative t	o Valuation As	ssumption		
AY	0.00%	0.00%	0.26%	0.76%	1.26%	1.76%	0.22%	0.229
	0.00%	0.00%	0.26%	0.76% (290)	1.26% (578)	1.76% (853)		
			0.26% - curr val					
	23	23	-	(290) curr + 50bp	(578)	(853)	7	prior fyr en
AY Total	23	23	curr val	(290) curr + 50bp	(578)	(853)	7 prior val	prior fyr en
	23	23	curr val assumption	(290) curr + 50bp	(578)	(853) curr + 150bp	7 prior val	prior fyr er
	23	23	curr val assumption	(290) curr + 50bp	(578) curr + 100bp	(853) curr + 150bp	7 prior val	prior fyr en assumption
Total	23 curr - 100 bp	23 curr - 50 bp	curr val assumption Percentage I	(290) curr + 50bp mpact Relativ	(578) curr + 100bp e to Valuation	(853) curr + 150bp Assumption	7 prior val assumption	prior fyr en assumption
AY 2005	23 curr - 100 bp	23 curr - 50 bp	curr val assumption Percentage I	(290) curr + 50bp mpact Relativ	(578) curr + 100bp e to Valuation	(853) curr + 150bp Assumption	7 prior val assumption	prior fyr en assumption
AY 2005 2006	23 curr - 100 bp	23 curr - 50 bp	curr val assumption Percentage I	(290) curr + 50bp mpact Relativ	(578) curr + 100bp e to Valuation	(853) curr + 150bp Assumption	7 prior val assumption	prior fyr en assumption
AY 2005 2006 2007	23 curr - 100 bp	23 curr - 50 bp	curr val assumption Percentage I	(290) curr + 50bp mpact Relativ	(578) curr + 100bp e to Valuation	(853) curr + 150bp Assumption	7 prior val assumption	prior fyr en assumption
AY 2005 2006 2007 2008	23 curr - 100 bp	23 curr - 50 bp	curr val assumption Percentage I	(290) curr + 50bp mpact Relativ	(578) curr + 100bp e to Valuation	(853) curr + 150bp Assumption	7 prior val assumption	prior fyr en assumption
AY 2005 2006 2007 2008 2009	23 curr - 100 bp	23 curr - 50 bp	curr val assumption Percentage I	(290) curr + 50bp mpact Relativ	(578) curr + 100bp e to Valuation	(853) curr + 150bp Assumption	7 prior val assumption	prior fyr en assumption
AY 2005 2006 2007 2008 2009 2010	23 curr - 100 bp	23 curr - 50 bp	curr val assumption Percentage I	(290) curr + 50bp mpact Relativ 0.76%	(578) curr + 100bp e to Valuation 1.26%	(853) curr + 150bp Assumption 1.76%	7 prior val assumption	prior fyr en assumption
AY 2005 2006 2007 2008 2009 2010 2011	23 curr - 100 bp	23 curr - 50 bp	curr val assumption Percentage I	(290) curr + 50bp mpact Relativ 0.76%	(578) curr + 100bp e to Valuation 1.26%	(853) curr + 150bp Assumption 1.76%	7 prior val assumption	prior fyr en assumption
AY 2005 2006 2007 2008 2009 2010 2011 2012	23 curr - 100 bp	23 curr - 50 bp 0.00% - - - - - 0.4% 0.7%	curr val assumption Percentage I	(290) curr + 50bp mpact Relativ 0.76% (0.4%) (0.7%)	(578) curr + 100bp e to Valuation 1.26%	(853) curr + 150bp Assumption 1.76%	7 prior val assumption	prior fyr en assumption
AY 2005 2006 2007 2008 2010 2011 2012 2013	0.00% 0.04% 0.7% 0.2%	23 curr - 50 bp 0.00% 	curr val assumption Percentage I	(290) curr + 50bp mpact Relativ 0.76% (0.4%) (0.7%)	(578) curr + 100bp e to Valuation 1.26% (1.1%) (2.0%) (1.5%)	(853) curr + 150bp Assumption 1.76% (1.9%) (2.6%) (2.2%)	7 prior val assumption 0.22%	prior fyr en assumption
AY 2005 2006 2007 2008 2009 2011 2012 2013 2014	23 curr - 100 bp	23 curr - 50 bp 0.00% - - - - - 0.4% 0.7%	curr val assumption Percentage I	(290) curr + 50bp mpact Relativ 0.76% (0.4%) (0.7%) (0.7%) (0.7%)	(578) curr + 100bp e to Valuation 1.26% (1.1%) (2.0%) (1.5%) (1.6%)	(853) curr + 150bp Assumption 1.76%	7 prior val assumption	prior fyr en assumption
AY 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	0.00% 0.04% 0.7% 0.2%	23 curr - 50 bp 0.00% 	curr val assumption Percentage I	(290) curr + 50bp mpact Relativ 0.76% (0.4%) (0.7%) (0.7%) (0.7%)	(578) curr + 100bp e to Valuation 1.26% (1.1%) (2.0%) (1.5%) (1.5%) (1.9%)	(853) curr + 150bp Assumption 1.76% (1.9%) (2.6%) (2.2%) (2.5%)	7 prior val assumption 0.22%	prior fyr en assumption
AY 2005 2006 2007 2008 2010 2011 2012 2013 2014 2015 2016	23 curr - 100 bp	23 curr - 50 bp	curr val assumption Percentage I	(290) curr + 50bp mpact Relativ 0.76% (0.4%) (0.7%) (0.7%) (0.9%) (1.1%)	(578) curr + 100bp e to Valuation 1.26%	(853) curr + 150bp Assumption 1.76%	7 prior val assumption 0.22%	prior fyr er assumptio
AY 2005 2006 2007 2008 2010 2011 2012 2014 2015 2016 2017	23 curr - 100 bp	0.00% 0.	curr val assumption Percentage I	(290) curr + 50bp mpact Relativ 0.76%	(578) curr + 100bp e to Valuation 1.26%	(853) curr + 150bp Assumption 1.76%	7 prior val assumption 0.22%	0.229
AY 2005 2006 2007 2008 2009 2011 2012 2013 2014 2015 2016 2017 2018	0.00% 0.00% 0.04% 0.7% 0.1% 0.1%	23 curr - 50 bp	curr val assumption Percentage I	(290) curr + 50bp mpact Relativ 0.76%	(578) curr + 100bp e to Valuation 1.26%	(853) curr + 150bp Assumption 1.76%	7 prior val assumption 0.22%	0.225
AY 2005 2006 2007 2008 2009 2011 2012 2013 2014 2015 2016 2017 2018 2019	0.00% 0.00% 0.04% 0.7% 0.24% 0.1% 0.1% 0.1% 0.1% 0.1%	23 curr - 50 bp 0.00%	curr val assumption Percentage I	(290) curr + 50bp mpact Relativ 0.76%	(578) curr + 100bp e to Valuation 1.26%	(853) curr + 150bp Assumption 1.76%	7 prior val assumption 0.22% 0.1% 0.0% 0.0% 0.0%	0.229 0.229 0.19
AY 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020	23 curr - 100 bp 0.00% 0.00% 0.4% 0.7% 0.2% 0.1% 0.1% 0.1% 0.1% 0.1% 0.1%	23 curr - 50 bp 0.00%	curr val assumption Percentage I	(290) curr + 50bp mpact Relativ 0.76%	(578) curr + 100bp e to Valuation 1.26%	(853) curr + 150bp Assumption 1.76%	7 prior val assumption 0.22%	0.229 0.229 0.19 0.09 0.09 0.09
AY 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020	23 curr - 100 bp	0.00%	curr val assumption Percentage I 0.26%	(290) curr + 50bp mpact Relativ 0.76%	(578) curr + 100bp e to Valuation 1.26%	(853) curr + 150bp Assumption 1.76%	7 prior val assumption 0.22%	0.229
AY 2005 2006 2007 2008 2009 2011 2012 2013 2014 2015 2016 2017 2018 2019	23 curr - 100 bp 0.00% 0.00% 0.4% 0.7% 0.2% 0.1% 0.1% 0.1% 0.1% 0.1% 0.1%	0.00%	curr val assumption Percentage I	(290) curr + 50bp mpact Relativ 0.76%	(578) curr + 100bp e to Valuation 1.26%	(853) curr + 150bp Assumption 1.76%	7 prior val assumption 0.22%	0.229



EXHIBIT G

Page 1 of 2 Components of Member Statement IBNR (i.e. "Discounted") Change During Month

RSP New Brunswick
AccountCode Desc IBNR - Discounted M/S IBNR - in \$000s

	Values	ī			ı		
AccYear	Sum of Prior Month Actual Amount	Sum of Projected Change	Sum of Change Due to AvsP Variances	Sum of Change Due to Valuation Implementation	Sum of Total Change	Sum of % Total Change	Sum of Current Month Final Amount
2006	-	-	-	-	-	-	-
2007	6	-	-	-	-	-	6
2008	12	-	-	-	-	-	12
2009	6	-	-	-	-	-	6
2010	(2)	-	-	-	-	-	(2)
2011	57	(2)	1	-	(1)	(1.8%)	56
2012	50	(2)	2	-	-	-	50
2013	167	(6)	6	-	-	-	167
2014	118	(4)	2	-	(2)	(1.7%)	116
2015	171	(7)	(98)	-	(105)	(61.4%)	66
2016	305	(11)	16	-	5	1.6%	310
2017	1,112	(12)	(19)	-	(31)	(2.8%)	1,081
2018	1,813	(56)	(146)	-	(202)	(11.1%)	1,611
2019	2,647	(57)	(20)	-	(77)	(2.9%)	2,570
2020	3,866	(52)	(61)	-	(113)	(2.9%)	3,753
2021	2,185	460	107	-	567	25.9%	2,752
Grand Total	12,511	251	(210)	-	41	0.3%	12,552



EXHIBIT G

Page 2 of 2

Components of IBNR (i.e. "Undiscounted") Change During Month

RSP New Brunswick
AccountCode Desc IBNR - Undiscounted M/S IBNR - in \$000s

	Values				ī		
AccYear	Sum of Prior Month Actual Amount	Sum of Projected Change	Sum of Change Due to AvsP Variances	Sum of Change Due to Valuation Implementation	Sum of Total Change	Sum of % Total Change	Sum of Current Month Final Amount
2006	-	-	-	-	-	-	-
2007	5	-	-	-	-	-	5
2008	4	-	-	-	-	-	4
2009	3	-	-	-	-	-	3
2010	(2)	-	-	-	-	-	(2)
2011	11	-	-	-	-	-	11
2012	32	(1)	1	-	-	-	32
2013	75	(3)	3	-	-	-	75
2014	26	(1)	(1)	-	(2)	(7.7%)	24
2015	117	(5)	(99)	-	(104)	(88.9%)	13
2016	185	(7)	12	-	5	2.7%	190
2017	803	(8)	(21)	-	(29)	(3.6%)	774
2018	1,287	(51)	(149)	-	(200)	(15.5%)	1,087
2019	1,996	(50)	(22)	-	(72)	(3.6%)	1,924
2020	3,213	(32)	(75)	-	(107)	(3.3%)	3,106
2021	1,893	384	101	-	485	25.6%	2,378
Grand Total	9,646	226	(250)	-	(24)	(0.2%)	9,622