

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

MEMBERS OF THE FACILITY ASSOCIATION TO:

CHIEF EXECUTIVE OFFICER ATTENTION:

F17 - 078**BULLETIN NO.:** 

**OCTOBER 3, 2017** DATE:

RISK SHARING POOLS' FINAL OUTLOOK FOR CALENDAR **SUBJECT:** 

YEAR 2018 BASED ON AUGUST 2017 OPERATIONAL REPORTS

To assist member companies in planning for their share of Risk Sharing Pools' (RSP) results for the next calendar year, Facility Association prepares RSP "Outlook" projections of Net Results from Operations. The Outlook presentation format (Exhibits B1 - B5) is very similar to that of the "Summary of Operations - Calendar Year" exhibits of the monthly Operational Reports Member Bulletins ("Bulletins").

The attached is the *final* calendar year 2018 RSP Outlook by pool, based on actual results as found in the August 2017 Operational Reports. Recall that a preliminary calendar year 2018 RSP Outlook by pool, based on actual results as found in the May 2017 Operational Reports, was released and posted to the Facility Association website on July 6, 2017 (Bulletin F17-053). Differences between the two projections are summarized in the attached final Outlook (section 2.2). In particular, projected 2018 written premium across all of the RSPs in total has increased by \$125.3 million (19.7%) to \$761.2 million across all RSPs, and the projected net operating deficit deteriorated by \$82.6 million (30.5%) to \$353.6 million. Changes provided by members between the Preliminary 2018 Outlook and the preparation of this Final 2018 Outlook have driven these changes.

The Alberta Insurance Rate Board posted its 2017 Decision and Background Information on its website on September 29, 2017, supporting a +10.0% rate increase for Grid mandatory coverages. This increase has not been explicitly taken into account in the Final 2018 Outlook, although members who provided projections of their 2018 transfers into the Alberta RSPs may have included assumptions related to expected Grid rate increases as part of their projection process.

The attached *final* RSP Outlook is derived through a projection process that attempts to model future outcomes based on a set of simplifying assumptions. As with any such process of projecting future outcomes, inherent uncertainty exists. For example, RSP premium volumes have in the past varied in ways that are difficult to model or project (charts showing history of premium volumes can be found at the "Provincial Profiles" section of our website) - this is further evidenced by the 19.7% increase in the 2018 written premium projection from the preliminary Outlook released 3 months prior to this final Outlook. (Volume projections are based on projections provided by larger

# Bulletin F17–078 RISK SHARING POOLS' FINAL OUTLOOK FOR CALENDAR YEAR 2018 BASED ON AUGUST 2017 OPERATIONAL REPORTS

users of the RSPs.) As such, we stress that it is important to recognize that future Operating Results may deviate from these projections by material amounts.

The tables on the next page provide a summary of the projections for calendar years 2018 and 2017 and the actuals for calendar year 2016 for reference purposes.

Projection Summaries - Calendar Year 2018 - Key Amounts (\$000s) and Key Ratios

	Actual and Projected Calendar Year Results							
Ontario RSP		2018 2017 Change (to 2018 from 2017		rom 2017)	2016			
Written	Premium (\$000s)	413,190	376,652	36,538	9.7%	<b>336,050</b> 183,082		
	Vehicle Count	219,457	203,979	15,478	7.6%	183,082		
Earned	Premium (\$000s)	382,147	374,862	7,285	1.9%	270,863		
Net Operating Result (\$000s)		(253,404)	(136,122)	(117,282)	86.2%	(104,476)		
	COR	166.3%	136.3%	30.0%	22.0%	138.6%		
Prior Accide	ent Years' incurred claims (\$000s)	(28,700)	(108,040)	79,340	(73.4%)	(106,935)		

	Actual and Projected Calendar Year Results							
Alberta Grid RSP		2018	2017	Change (to 2018 f	rom 2017)	2016		
Written	Premium (\$000s)	189,665	162,164	27,501	17.0%	148,471		
	Vehicle Count	76,403	67,275	9,128	13.6%	63,360		
Earned	Premium (\$000s)	184,393	150,412	33,981	22.6%	131,818		
Net Operati	Net Operating Result (\$000s)		(59,288)	16,937	(28.6%)	(73,942)		
COR		122.9%	139.5%	(16.6%)	(11.9%)	156.1%		
Prior Accident Years' incurred claims (\$000s)		(7,147)	8,663	(15,810)	(182.5%)	39,458		

	Actual and Projected Calendar Year Results						
Alberta Non-Grid RSP		2018	2017	Change (to 2018 fro	om 2017)	2016	
Written	Premium (\$000s)	101,307	94,647	6,660	7.0%	99,669	
	Vehicle Count	67,932	63,278	4,654	7.4%	67,752	
Earned	Premium (\$000s)	97,354	96,253	1,101	1.1%	90,473	
<b>Net Operati</b>	ing Result (\$000s)	(43,686)	(45,569)	1,883	(4.1%)	(49,394)	
	COR	144.9%	147.3%	(2.4%)	(1.6%)	154.6%	
Prior Accident Years' incurred claims (\$000s)		(4,392)	(2,681)	(1,711)	63.8%	(877)	

	Actual and Projected Calendar Year Results							
New Brunswick RSP		2018	2017	Change (to 2018	from 2017)	2016		
Written Premium (\$000s)		17,486	13,318	4,168	31.3%	9,742		
	Vehicle Count	13,689	10,868	2,821	26.0%	8,502		
Earned	Premium (\$000s)	15,974	10,781	5,193	48.2%	9,977		
Net Operating Result (\$000s)		(1,453)	886	(2,339)	(264.1%)	1,301		
	COR	109.0%	91.7%	17.3%	18.9%	87.0%		
Prior Accident Years' incurred claims (\$000s)		(265)	(2,404)	2,139	(89.0%)	(3,001)		

# Bulletin F17–078 RISK SHARING POOLS' FINAL OUTLOOK FOR CALENDAR YEAR 2018 BASED ON AUGUST 2017 OPERATIONAL REPORTS

	Actual and Projected Calendar Year Results							
Nova Scotia RSP		2018	2017	Change (to 2018 f	rom 2017)	2016		
Written Premium (\$000s)		39,593	28,378	11,215	39.5%	15,183		
	Vehicle Count	26,009	19,685	6,324	32.1%	12,555		
Earned	Premium (\$000s)	35,242	18,850	16,392	87.0%	14,799		
Net Operating Result (\$000s)		(12,656)	(3,654)	(9,002)	246.4%	(5,501)		
	COR	136.0%	119.4%	16.6%	13.9%	137.1%		
Prior Accide	Prior Accident Years' incurred claims (\$000s)		(5,202)	4,622	(88.9%)	(635)		

Questions regarding the Outlook should be directed to Shawn Doherty, SVP, Actuarial and CFO at Facility Association, (416) 644-4968 or <a href="mailto:sdoherty@facilityassociation.com">sdoherty@facilityassociation.com</a>

David J. Simpson, M.B.A., FCIP, C. Dir. President & CEO

#### Attach.

Please forward a copy of this bulletin to your Chief Financial Officer.



# OUTLOOK FOR CALENDAR YEAR 2018 (FINAL)

# **RISK SHARING POOLS**

## **OCTOBER 2017**

# **BASED ON AUGUST 2017 OPERATIONAL REPORTS**

For your convenience, bookmarks have been added to this document. To view them, please click on the BOOKMARK tab at the left.

Should you require any further information, please call:

Shawn Doherty, FCIA, FCAS SVP Actuarial & CFO (416) 644-4968.



#### **OUTLOOK TO CALENDAR YEAR 2018**

#### **RISK SHARING POOLS**

#### **OCTOBER 2017**

#### BASED ON AUGUST 2017 OPERATIONAL REPORTS

#### **TABLE OF CONTENTS**

1.	EXEC	UTIVE SUMMARY	3
2.	INTRO	ODUCTION	(
	2.1	Introductory Comments	<i>6</i>
	2.2	Comparison with Preliminary Outlook	9
	2.3	Summary of Results	12
	2.4	Outlook Purpose and Projection Uncertainty	
	2.5	Definitions and Presentation	
3.	BASIS	FOR PROJECTIONS	32
	3.1	Premiums	32
	3.2	Claims Amounts	38
	3.3	Simulated 2018 Accident Year Nominal Loss Ratio	43
	3.4	Expenses	
	3.5	Operating Cash Flows	47
4.	EXHII	BITS	52

#### **LIST OF EXHIBITS**

### **EXHIBIT A** Key Assumptions (counts, premium, loss ratios)

- A-1 Ontario
- A-2 Alberta Grid
- A-3 Alberta Non-Grid
- A-4 New Brunswick
- A-5 Nova Scotia

Continued...



#### **EXHIBIT B** RSP Outlook – Summary of Operations

- **B-1** Ontario
- B-2 Alberta Grid
- B-3 Alberta Non-Grid
- **B-4** New Brunswick
- B-5 Nova Scotia

#### **EXHIBIT C** RSP Outlook – Projected Policy Liabilities

- C-1 Ontario
- C-2 Alberta Grid
- C-3 Alberta Non-Grid
- C-4 New Brunswick
- C-5 Nova Scotia

#### LINKS TO SPECIFIC REFERENCED DOCUMENTS

#### **Actuarial Highlights - Monthly Operational - August 2017**

Ontario RSP August 2017 Operational Report – Actuarial Highlights

Alberta Grid RSP August 2017 Operational Report - Actuarial Highlights

<u>Alberta Non-Grid RSP August 2017 Operational Report - Actuarial Highlights</u>

New Brunswick RSP August 2017 Operational Report – Actuarial Highlights

Nova Scotia RSP August 2017 Operational Report – Actuarial Highlights

#### Actuarial Highlights - Quarterly Valuations - 2017 Q2

Actuarial Quarterly Valuation Highlights Risk Sharing Pools as at June 30, 2017

#### Outlook

Risk Sharing Pools' Outlook for Calendar Year 2017



#### 1. Executive Summary

This "Final RSP Outlook" is a projection of Facility Association Risk Sharing Pools ("RSP") Operating Results for a future complete calendar year using actual experience available up to a specific point in time, and based on assumptions developed for this specific purpose. Consideration has been given to recent RSP experience, to the results of the June 30, 2017 valuation of the RSP policy liabilities, and to monthly premium projections developed for RSP Monthly Member Operational Reports.

Annually, 2 RSP Outlooks are released for members, being "Preliminary" and "Final" versions in relation to the next calendar year. The former is released earlier in the current year to allow members to consider the projected results early on in their planning process, but necessarily includes significant projection error, as almost two full calendar years require projecting. The latter is released in the fall of the current year.

This release is the **Final** RSP Outlook for **calendar year 2018** based on the actual results as found in the August 2017 Operational Reports. The Preliminary RSP Outlook for calendar year 2018 was made available to members on July 6, 2017 based on the May 2017 Operational Reports, and **there are material changes in the Final Outlook from the Preliminary Outlook which we have summarized in the 2 tables that follow. In particular, <b>total written premium** transfers have **increased by \$125 million (20%)**, and the **total operating deficit** has **increased \$83 million (31%)**, mainly driven by changes in projected transfers provided by larger users.

Projection CHANGE – Calendar Year 2018 – FROM PRELIMINARY TO FINAL

2018 Ca	lendar Year Fi	nal less Prelim	inary Outlook P	rojections (\$0	00s)	
	Ontario	Alberta Grid	Alberta Non- Grid	New Brunswick	Nova Scotia	TOTAL
Written Premium	85,598	38,789	(5,254)	2,364	3,775	125,272
Earned Premium	51,489	29,755	(7,859)	900	556	74,841
Prior Accident Years (PAYs)	2,259	(55)	114	72	182	2,572
Current Accident Year (CAY)	70,552	33,693	(4,640)	160	(1,717)	98,048
Total Claims Incurred	72,811	33,638	(4,526)	232	(1,535)	100,620
Expense Allowance	26,898	12,729	(706)	177	857	39,955
Change in Prem. Def / (DPAC)	15,674	10	461	(236)	11	15,920
Underwriting Expenses	42,572	12,739	(245)	(59)	868	55,875
	-	-	-	-	-	-
Net U/Wing gain / (loss)	(63,894)	(16,622)	(3,088)	727	1,223	(81,654)
Administrative Expense	411	339	(28)	120	131	973
Operating Result	(64,305)	(16,961)	(3,060)	607	1,092	(82,627)
attributed to PAYs:	(2,259)	55	(114)	(72)	(182)	(2,572)
attributed to CAY:	(62,046)	(17,016)	(2,946)	679	1,274	(80,055)



#### Projection CHANGE – Calendar Year 2018 – FROM PRELIMINARY TO FINAL

2018 Calend	dar Year Final l	ess Prelimina	y Outlook Proje	ctions (% diffe	erence)	
	Ontario	Alberta Grid	Alberta Non- Grid	New Brunswick	Nova Scotia	TOTAL
Written Premium	26.1%	25.7%	(4.9%)	15.6%	10.5%	19.7%
Earned Premium	15.6%	19.2%	(7.5%)	6.0%	1.6%	11.7%
Prior Accident Years (PAYs)	(7.3%)	0.8%	(2.5%)	(21.4%)	(23.9%)	(5.9%)
Current Accident Year (CAY)	15.8%	23.9%	(4.0%)	1.4%	(4.7%)	13.0%
Total Claims Incurred	17.5%	25.2%	(4.0%)	2.0%	(4.3%)	14.2%
Expense Allowance	27.8%	29.2%	(2.3%)	3.7%	7.7%	21.4%
Change in Prem. Def / (DPAC)	245.4%	0.5%	25.1%	(737.5%)	1.8%	148.5%
Underwriting Expenses	41.3%	28.0%	(0.8%)	(1.2%)	7.4%	28.3%
	-	-	-	-	-	-
Net U/Wing gain / (loss)	34.1%	67.8%	7.8%	(56.4%)	(9.8%)	30.8%
Administrative Expense	26.1%	38.8%	(2.8%)	15.6%	10.5%	17.8%
Operating Result	34.0%	66.8%	7.5%	(29.5%)	(7.9%)	30.5%
attributed to PAYs:	(7.3%)	0.8%	(2.5%)	(21.4%)	(23.9%)	(5.9%)
attributed to CAY:	28.2%	52.4%	6.5%	(28.3%)	(8.8%)	25.4%

Updated projections will be made throughout 2018 and included in the Bulletins and the corresponding Calendar Year Summary of Operations included with the Bulletins. This will provide members with the most up-to-date projection for the full current calendar year.

The tables on the next page provide a high-level summary of key metrics projected for calendar years 2018 and 2017, with actuals for 2016 provided for reference. Supporting details related to the projections are provided in the body of this report.

Readers are reminded that RSP operating results do not include all expenses incurred by members to support this business – for example, premium taxes and health levies are applied at member companies based on their share of RSP written premium or vehicle counts as applicable – these expenses are not included here. As such, the Combined Operating Ratio may not be comparable to a member's own such ratio. Similarly, investment income is not included in these results – that is, any investment income earned by members on RSP related funds held by members is not included in these results.

Readers are also reminded that, while we work hard to ensure the projections are based on assumptions we feel are solid given our current information, there is significant uncertainty related to these projections. One important uncertainty is related to how the +10.0% Alberta Grid mandatory coverage rate as approved by the Alberta Automobile Insurance Rate Board (decision posted to their website on September 29, 2017) would impact individual member company's view on the resulting rate adequacy and their resulting interaction with the Alberta RSPs.



### Projection Summaries - Calendar Year 2018 - Key Amounts (\$000s) and Key Ratios

	Actual and Projected Calendar Year Results								
Ontario RSP		2018	2017	Change (to 2018 f	Change (to 2018 from 2017)				
Written	Premium (\$000s)	413,190	376,652	36,538	9.7%	336,050			
	Vehicle Count	219,457	203,979	15,478	7.6%	183,082			
Earned	Premium (\$000s)	382,147	374,862	7,285	1.9%	270,863			
<b>Net Operat</b>	Net Operating Result (\$000s)		(136,122)	(117,282)	86.2%	(104,476)			
COR		166.3%	136.3%	30.0%	22.0%	138.6%			
Prior Accident Years' incurred claims (\$000s)		(28,700)	(108,040)	79,340	(73.4%)	(106,935)			

	Actual and Projected Calendar Year Results							
Alberta Grid RSP		2018	2017	Change (to 2018	from 2017)	2016		
Written	Premium (\$000s)	189,665	162,164	27,501	17.0%	148,471		
	Vehicle Count	76,403	67,275	9,128	13.6%	63,360		
Earned	Premium (\$000s)	184,393	150,412	33,981	22.6%	131,818		
<b>Net Operat</b>	Net Operating Result (\$000s)		(59,288)	16,937	(28.6%)	(73,942)		
	COR	122.9%	139.5%	(16.6%)	(11.9%)	156.1%		
Prior Accident Years' incurred claims (\$000s)		(7,147)	8,663	(15,810)	(182.5%)	39,458		

	Actual and Projected Calendar Year Results							
Alberta Non-Grid RSP		2018	2017	Change (to 2018 f	rom 2017)	2016		
Written	Written Premium (\$000s)		94,647	6,660	7.0%	99,669		
	Vehicle Count	67,932	63,278	4,654	7.4%	67,752		
Earned	Premium (\$000s)	97,354	96,253	1,101	1.1%	90,473		
<b>Net Operat</b>	Net Operating Result (\$000s)		(45,569)	1,883	(4.1%)	(49,394)		
	COR	144.9%	147.3%	(2.4%)	(1.6%)	154.6%		
Prior Accid	Prior Accident Years' incurred claims (\$000s)		(2,681)	(1,711)	63.8%	(877)		

	Actual and Projected Calendar Year Results							
New Brunswick RSP		2018	2017	Change (to 2018 for	rom 2017)	2016		
Written	Written Premium (\$000s)		13,318	4,168	31.3%	9,742		
	Vehicle Count	13,689	10,868	2,821	26.0%	8,502		
Earned	Premium (\$000s)	15,974	10,781	5,193	48.2%	9,977		
<b>Net Operat</b>	Net Operating Result (\$000s)		886	(2,339)	(264.1%)	1,301		
	COR	109.0%	91.7%	17.3%	18.9%	87.0%		
Prior Accident Years' incurred claims (\$000s)		(265)	(2,404)	2,139	(89.0%)	(3,001)		

	Actual and Projected Calendar Year Results							
Nova Scotia RSP		2018	2017	Change (to 2018 from 2017)		2016		
Written	Premium (\$000s)	39,593	28,378	11,215 3	9.5%	15,183		
	Vehicle Count	26,009	19,685	6,324 3	2.1%	12,555		
Earned	Premium (\$000s)	35,242	18,850	16,392 8	7.0%	14,799		
Net Operating Result (\$000s)		(12,656)	(3,654)	(9,002) 24	6.4%	(5,501)		
COR		136.0%	119.4%	16.6% 1	3.9%	137.1%		
Prior Accide	ent Years' incurred claims (\$000s)	(580)	(5,202)	4,622 (8	8.9%)	(635)		



#### 2. Introduction

#### 2.1 Introductory Comments

This "Final RSP Outlook" is a projection of Facility Association Risk Sharing Pools ("RSP") Operating Results for a future complete calendar year using actual experience available up to a specific point in time, and based on assumptions developed for this specific purpose. Consideration has been given to recent RSP experience, to the results of the June 30, 2017 valuation of the RSP policy liabilities, and to monthly premium projections developed for RSP Monthly Member Operational Reports.

The table below summarizes the calendar year  $\underline{2018}$  projection by RSP – greater detail is provided in section 0.

Projection Summary – Calendar Year 2018 – Amounts (\$000s)

	Calendar Year 2018 Projections (\$000s)							
	Ontario	Alberta Grid	Alberta Non- Grid	New Brunswick	Nova Scotia	TOTAL		
Written Premium	413,190	189,665	101,307	17,486	39,593	761,241		
Earned Premium	382,147	184,393	97,354	15,974	35,242	715,110		
Prior Accident Years (PAYs)	(28,700)	(7,147)	(4,392)	(265)	(580)	(41,084)		
Current Accident Year (CAY)	516,667	174,468	112,070	12,004	34,524	849,733		
Total Claims Incurred	487,967	167,321	107,678	11,739	33,944	808,649		
Expense Allowance	123,541	56,332	30,089	5,001	11,960	226,923		
Change in Prem. Def / (DPAC)	22,060	1,878	2,300	(204)	610	26,644		
Underwriting Expenses	145,601	58,210	32,389	4,797	12,570	253,567		
Net U/Wing gain / (loss)	(251,421)	(41,138)	(42,713)	(562)	(11,272)	(347,106)		
Administrative Expense	1,983	1,213	973	891	1,384	6,444		
2018 Operating Result	(253,404)	(42,351)	(43,686)	(1,453)	(12,656)	(353,550)		
attributed to PAYs:	28,700	7,147	4,392	265	580	41,084		
attributed to CAY:	(282,104)	(49,498)	(48,078)	(1,718)	(13,236)	(394,634)		

This updated calendar year **2018** projection **has changed materially from** our projection as provided in **the 2018 Preliminary Outlook** which was posted on July 6, 2017, with **the overall operating deficit up \$82.6 million (30.5%)** and **overall written premium up \$125.3 million (19.7%)**. The largest contributors to the overall changes are the Ontario RSP (operating deficit worse by \$64.3 million or 34.0%) and the Alberta Grid RSP (operating deficit worse by \$17.0 million or 66.8%).

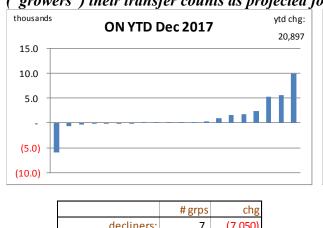
As usual, our projected vehicle counts and projected written premium is largely provided by significant RSP users. Projection updates are requested from the larger users quarterly, and FA management follows-up for confirmation of projected amounts where significant changes in a member's projections occur (FA does not ask for nor receive information on the "why" of a member projection, as this is viewed as confidential – management simply asks for confirmation that the member themselves believe the projection to be reasonable).

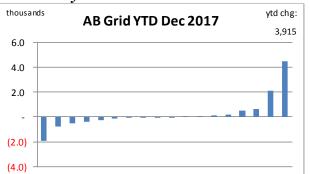


For example, while there were 19 active<sup>1</sup> member groups identified for the Ontario RSP, the 9 member groups providing explicit projections account for 96% of the Ontario RSP vehicle counts transferred for the 12-month period ending August 2017. For the Alberta Grid RSP, while there were 17 active member groups identified, the 7 member groups that provided explicit projections account for 86% of the Alberta Grid RSP vehicle counts transferred for the 12-month period ending August 2017.

To provide some perspective on the projections for the Ontario and Alberta Grid RSPs, we've provided year-end projections summaries of the "decliners / growers" charts akin to those provided monthly in the Actuarial Highlights.

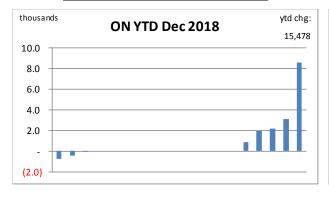
Projection Summaries – Member Company Groups decreasing ("decliners") or increasing ("growers") their transfer counts as projected for calendar years 2017 and 2018





	# grps	chg
decliners:	7	(7,050)
no changers:	-	-
growers:	13	27,947

	# grps	chg
decliners:	10	(4,093)
no changers:	-	-
growers:	8	8,008

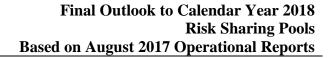


thousan	AB Grid YTD Dec 2018	ytd chg: 9,128
10.0 -		9,128
8.0 -		
6.0 -		
4.0 -		_
2.0 -		
(2.0)		

	# grps	chg
decliners:	3	(1,177)
no changers:	10	-
growers:	6	16,655

	# grps	chg
decliners:	3	(634)
no changers:	10	-
growers:	4	9,762

<sup>&</sup>lt;sup>1</sup>We consider a member group to be "active" if they have non-zero transfer counts in at least 1 month in the current or prior calendar year. Members that are under common management for transfer limit purposes are considered a single "member group".





A comparison between the Preliminary 2018 Outlook and this Final 2018 Outlook is explored in more detail in section 2.2.

As noted in section 2.2, there are notable differences between the overall operating result projected for calendar year <u>2018</u> in this Final Outlook and two comparable projections for calendar year <u>2017</u>, being our calendar year projection posted on September 28, 2016 ("Sep 28 2016 Outlook") and our current projection ("Aug 31 2017 Projections"). These differences are mainly due to prior accident year impacts and changes in premium volume.

Like our *Sep 28 2016 Outlook* for calendar year 2017, this Outlook's projection for calendar year 2018 assumes no nominal changes to our estimates of ultimate for prior accident years<sup>2</sup>, whereas the current projection for calendar year 2017 (*Aug 31 2017 Projections*) includes nominal prior accident year changes as booked during the first eight months of 2017. Given the importance of accident year impacts, we have separated the Operating Results summary to show "prior accident years" (PAYs) from the "current accident year" (CAY). This view shows that the overall PAY impact for calendar year 2018 at \$41.1 million favourable is similar to last year's final Outlook projection for 2017 (\$42.8 million favourable) reflecting expected releases of actuarial present value adjustments (unwinding of discount amounts offset by releases of provisions for adverse deviations as claims liabilities are settled). In contrast, the current full year 2017 projection shows total PAYs impacts at \$109.7 million favourable due to additional favourable nominal impacts of valuation updates.

Our projections of the number of vehicles transferred to the RSPs are based on feedback provided by large users of the RSPs. Some of the RSPs have specific limits to the number of risks that can be transferred in a given period. For example, the transfer limit of the Ontario RSP is 5.0% of exposures written in the prior year at the member company group level (that is, within a group under common management or ownership, a single member can transfer the entire transfer limit for the group). System programming prevents member groups from exceeding their transfer limits. However, member groups can transfer their entire limit for a given year at any time throughout the year including, for example, the last day of that year. As a result, volumes may change dramatically from those projected here.

Written premium projection volatility is highlighted in the table at the top of the next page in relation to the Ontario RSP. The August 2016 projections were the basis for the Final 2017 Outlook, the May 2017 the basis for the Preliminary 2018 Outlook, and the August 2017 the basis for this (Final) 2018 Outlook.

<sup>&</sup>lt;sup>2</sup>In our projections, we assume that our liabilities are "best estimates" and therefore project no changes in nominal terms. However, there are prior accident year impacts related to actuarial present value adjustments. Over time, the "discount" adjustment to reflect the time value of money will unwind and provisions for adverse deviations will be released with liability / obligation settlement.



Ontario RSP Calendar Year Written Premium Projections (millions) over time

Calendar Year	Preliminary 2017 Outlook	Final 2017 Outlook	Preliminary 2018 Outlook	Final 2018 Outlook
2016	\$324.9	\$321.9	\$336.1	\$336.1
2017	\$354.7	\$342.2	\$353.8	\$376.7
2018	not projected	not projected	\$327.6	\$413.2

Source: FA Outlooks. Preliminary Outlooks are based on data as at May of the preceding year, whereas the Final Outlook is based on August data from the preceding year. For example, the Preliminary and Final 2018 Outlooks were based on actual and projected results as at May 2017 and August 2017 respectively.

#### 2.2 Comparison with Preliminary Outlook

The Preliminary Outlook to Calendar Year **2018**, released on July 6, 2017, was based on the valuation as at March 31, 2017 and the May 2017 Operational Reports. The table immediately at the top of the next page shows **the change from that preliminary Outlook** to this (final) update (projected results for 2018 with this Outlook are presented in section 2.3).

Change from 2018 Preliminary Outlook to 2018 Final Outlook – Operating Results (\$000s)

2018 Ca	2018 Calendar Year Final less Preliminary Outlook Projections (\$000s)						
	Ontario	Alberta Grid	Alberta Non- Grid	New Brunswick	Nova Scotia	TOTAL	
Written Premium	85,598	38,789	(5,254)	2,364	3,775	125,272	
Earned Premium	51,489	29,755	(7,859)	900	556	74,841	
Prior Accident Years (PAYs)	2,259	(55)	114	72	182	2,572	
Current Accident Year (CAY)	70,552	33,693	(4,640)	160	(1,717)	98,048	
Total Claims Incurred	72,811	33,638	(4,526)	232	(1,535)	100,620	
Expense Allowance	26,898	12,729	(706)	177	857	39,955	
Change in Prem. Def / (DPAC)	15,674	10	461	(236)	11	15,920	
Underwriting Expenses	42,572	12,739	(245)	(59)	868	55,875	
	-	-	-	-	-		
Net U/Wing gain / (loss)	(63,894)	(16,622)	(3,088)	727	1,223	(81,654)	
Administrative Expense	411	339	(28)	120	131	973	
Operating Result	(64,305)	(16,961)	(3,060)	607	1,092	(82,627)	
attributed to PAYs:	(2,259)	55	(114)	(72)	(182)	(2,572)	
attributed to CAY:	(62,046)	(17,016)	(2,946)	679	1,274	(80,055)	

Expense allowance assumptions were updated to reflect the FA Board's approved changes for calendar year 2018<sup>3</sup>, as summarized in the table below (the Preliminary Outlook assumed a continuation of the 2017 allowances).

<sup>&</sup>lt;sup>3</sup> The FA Board of Directors approved calendar year 2018, RSP expense allowances at its August 24, 2017 meeting. Please see FA Bulletins F17-068 through F17-071 inclusive available in the Members' Section of the FA website.



RSP / Jurisdiction	Approved Expense Factor CY 2018	Approved Expense Factor CY 2017	Comments
Ontario (expense cap)	32.0% with prof fee ratio increased to 3.0%	32.0%	no change in cap, but increase the professional fee offset by 1 point to 3.0% estimated effective expense ratio assumption is 30.2% for CY 2017 and 29.9% for CY 2018
Alberta	29.7%	28.9%	increase by 0.8 percentage points mainly due to increase in assumed ratio for acquisition, underwriting, and admin expenses
New Brunswick	28.6%	31.9%	decrease by 3.3 percentage points mainly due to claims expense ratio changes
Nova Scotia	30.2%	31.0%	decrease by 0.8percentage points mainly due to increase in assumed ratio for claims adjudication professional fees offset

For the Ontario RSP, the increase in the professional fee offset from 2.0% to 3.0% partially offset the otherwise projected increase in the weighted average of member expense ratios (for the Ontario RSP, the expense allowance is based on each member's own expense ratio as filed with FSCO, subject to the cap).

Comments more specific to changes in each RSP's projections are provided below.

For the Ontario RSP, the 2018 written premium projection has been <u>increased</u> by \$85.6 million (26.1%) based on updated member projections, impacting projected earned premium, expenses, and premium deficiency, and current accident year impacts. Specifically related to the latter, the increase in earned premium accounts for \$69.5 million of the \$70.6 million total increase in the current accident year (2018) incurred claims, as the underlying loss ratio <u>increased</u> only marginally (0.3 points to 135.2% on an actuarial present value basis). Updated projections of prior accident year impacts were minor from the Preliminary to Final Outlook. As a result of all updates, the projected net operating deficit has deteriorated by \$64.3 million (with all but \$2.3 million attributed to the current accident year 2018) – the deterioration is due to the increase in volume.

For the Alberta Grid RSP, the 2018 written premium projection has been <u>increased</u> by \$38.8 million (25.7%) based on updated member projections, impacting projected earned premium, expenses, and premium deficiency, and current accident year impacts. Specifically related to the latter, the increase in earned premium accounts for \$27.1 million of the \$33.7 million total increase in the current accident year (2018) incurred claims, with the underlying loss ratio <u>increase</u> (3.6 points to 94.6% on an actuarial present value basis) accounting for the remaining \$6.6 million change. Updated projections of prior accident year impacts were minor from the Preliminary to Final Outlook. As a result of all updates, the projected net operating deficit has deteriorated by



**\$16.7 million** (all attributed to the current accident year 2018) – the increase in volume accounts almost  $2/3^{\text{rds}}$  of the overall deterioration (the increase in the current accident year loss ratio accounts for the remainder).

For the Alberta Non-Grid RSP, the 2018 written premium projection has been <u>decreased</u> by \$5.3 million (4.9%), representing the only RSP with a decrease in written premium projection from the Preliminary to Final 2018 Outlook, and the only to show a written premium change less than 10%. The reduction in projected earned premium favourably impact the current accident year (2018) by \$8.7 million, but this was partially offset (by \$4.1 million) due to the current accident year loss ratio increase (4.2 points to 115.1% on an actuarial present value basis). As a result of all updates, the projected net operating deficit has deteriorated by \$3.1 million (almost attributed to the current accident year 2018) – with the deterioration due to the increase in the 2018 loss ratio.

For the two Atlantic RSPs, written premium projections <u>increased</u> (15.6% for the NB RSP and 10.5% for the NS RSP), but decreases projected loss ratios for the current year (2018) and future accident year (2019, impacting the premium deficiency calculation) favourably offset the volume increase, resulting in improved projected net operating results for both RSPs.

As indicated in the above discussion, the June 30, 2017 valuation also resulted in changes to accident year level ultimate estimates and projections for unpaid claims updated for actual payments as well as projections for future payments. The associated changes in applicable ratios are presented in the table below. Ratio changes are driven by updated valuation assumptions (for additional information on the changes in assumptions related to the latest valuation, please see the August 2017 Actuarial Highlights – links are available on page 2). Please note that the loss ratios indicated in the table include actuarial present value adjustments (whereas the Actuarial Highlights discussions focus on nominal loss ratios). The underlying nominal loss ratios that form the foundation of the 2018 loss ratios are taken directly from the valuation.

Change from 2018 Preliminary Outlook to 2018 Final Outlook – Key Ratios

Change in Calendar Year 2018 Projections (Key Ratios)						
	Ontario	Alberta Grid	Alberta Non- Grid	New Brunswick	Nova Scotia	TOTAL
Loss Ratios (% EP)						
Prior Accident Years (PAYs)	1.9%	0.7%	(0.2%)	0.5%	0.6%	1.1%
Current Accident Year (CAY)	0.3%	3.6%	4.2%	(3.5%)	(6.5%)	1.4%
Total Claims Incurred	2.2%	4.3%	4.0%	(3.0%)	(5.9%)	2.5%
Expense Ratios						
Expense Allowance (% WP)	0.4%	0.8%	0.8%	(3.3%)	(0.8%)	0.4%
Chg in Prem. Def / (DPAC) (% EP)	3.9%	(0.2%)	0.7%	(1.5%)	-	2.0%
Underwriting Expenses (% EP)	7.0%	2.1%	2.3%	(2.2%)	2.0%	4.7%
Administrative Expense (% EP)	-	0.1%	-	0.5%	0.3%	-
U/Wing & Admin Exp (% EP)	7.0%	2.2%	2.3%	(1.7%)	2.3%	4.7%
2018 Combined Operating Ratio (% EP)	9.2%	6.5%	6.3%	(4.7%)	(3.6%)	7.2%
attributed to PAYs:	1.9%	0.7%	(0.2%)	0.5%	0.6%	1.1%
attributed to CAY:	7.3%	5.8%	6.5%	(5.2%)	(4.2%)	6.1%



With the significant changes in the projected written premium, net operating cash flow is also affected, <u>in</u>creasing by \$61.9 million (32%) as shown in the table at the top of the next page (projected cash flows for 2018 with this Outlook are presented in section 3.5). The increase is significantly higher than the increase in written premium (up 20%) because of the inherent insurance cash flow lag between receipt of premium and payment of claims. Cash flows were also impacted by changes in claims payment projections based on feedback from valuation results.

Change from 2018 Preliminary Outlook to 2018 Final Outlook – Cash flow (\$000s)

2018 Calendar Year F		-	Alberta Non-	New		
	Ontario	Alberta Grid	Grid	Brunswick	Nova Scotia	TOTAL
Written Premium	85,598	38,789	(5,254)	2,364	3,775	125,272
PAYs Paid Claims						
paid indemnity	9,928	10,061	3,994	(280)	(1,065)	22,638
paid allowed claims expense	1,348	497	239	(9)	(60)	2,015
PAYs Paid Claims	11,276	10,558	4,233	(289)	(1,125)	24,653
CAYs Paid Claims						
paid indemnity	(15,334)	12,349	967	41	(85)	(2,062)
paid allowed claims expense	(154)	50	3	-	-	(101)
CAYs Paid Claims	(15,488)	12,399	970	41	(85)	(2,163)
All AYs Paid Claims						
paid indemnity	(5,406)	22,410	4,961	(239)	(1,150)	20,576
paid allowed claims expense	1,194	547	242	(9)	(60)	1,914
All AYs Paid Claims	(4,212)	22,957	5,203	(248)	(1,210)	22,490
"Cash" Expenses						
Member Expense Allowance	26,898	12,729	(706)	177	857	39,955
Administrative Expenses	411	339	(28)	120	131	973
"Cash" Expenses	27,309	13,068	(734)	297	988	40,928
Net Operating Cash Flow	62,501	2,764	(9,723)	2,315	3,997	61,854

#### 2.3 Summary of Results

Summary of Calendar Year 2018 Operating Results

The estimated calendar year **2018** Operating Results are summarized at the top of the next page. Policy liabilities and associated changes are presented on an actuarial present value basis as found in the Operational Reports (that is, "Total Claims Incurred" and "Change in Prem. Def / (DPAC)" include actuarial present value adjustments, commonly described as "discounted"). We have included at the bottom of the table the projected Operating Results for calendar year **2017** as per the *Sep 28 2016 Outlook* and with the *Aug 31 2017 Projections*<sup>4</sup>.

<sup>&</sup>lt;sup>4</sup>The *Aug 31 2017 Projections* for calendar year 2017 and this Outlook's projections for calendar year 2018 were derived at the same time, using consistent assumptions.



Projection Summary – Calendar Year 2018 – Amounts (\$000s)

	Calendar Year 2018 Projections (\$000s)							
	Ontario	Alberta Grid	Alberta Non- Grid	New Brunswick	Nova Scotia	TOTAL		
Written Premium	413,190	189,665	101,307	17,486	39,593	761,241		
Earned Premium	382,147	184,393	97,354	15,974	35,242	715,110		
Prior Accident Years (PAYs)	(28,700)	(7,147)	(4,392)	(265)	(580)	(41,084)		
Current Accident Year (CAY)	516,667	174,468	112,070	12,004	34,524	849,733		
Total Claims Incurred	487,967	167,321	107,678	11,739	33,944	808,649		
Expense Allowance	123,541	56,332	30,089	5,001	11,960	226,923		
Change in Prem. Def / (DPAC)	22,060	1,878	2,300	(204)	610	26,644		
Underwriting Expenses	145,601	58,210	32,389	4,797	12,570	253,567		
	-	-		-	-			
Net U/Wing gain / (loss)	(251,421)	(41,138)	(42,713)	(562)	(11,272)	(347,106)		
Administrative Expense	1,983	1,213	973	891	1,384	6,444		
2018 Operating Result	(253,404)	(42,351)	(43,686)	(1,453)	(12,656)	(353,550)		
attributed to PAYs:	28,700	7,147	4,392	265	580	41,084		
attributed to CAY:	(282,104)	(49,498)	(48,078)	(1,718)	(13,236)	(394,634)		
2017 Operating Result								
	(402.226)	(24.400)	(22.440)	(4.642)	(F 700)	(257.025)		
Sep 28, 2016 Outlook	(193,336)	(24,198)	• •	(1,643)	(5,700)	(257,025)		
attributed to PAYs:	30,099	7,061	4,446	390	801	42,797		
attributed to CAY:	(223,435)	(31,259)	(36,594)	(2,033)	(6,501)	(299,822)		
Aug 31, 2017 Projection	(136,122)	(59,288)	(45,569)	886	(3,654)	(243,747)		
attributed to PAYs:	108,040	(8,663)	•	2,404	5,202	109,664		
attributed to CAY:	(244,162)	(50,625)	(48,250)	(1,518)	(8,856)	(353,411)		

In comparing the calendar year **2018** operating result projection against the two projections for calendar year **2017**, **2018** has a significantly larger projected operating deficit resulting from the significant increase in volume, with the current projections showing an increase of 12.7% in written premium and 9.8% increase in earned premium (see table below).

Caler	Calendar Year 2018 Premium Comparisons (Amounts in \$000s)								
	Ontario	Alberta Grid	Alberta Non-	New	Nova Scotia	TOTAL			
	Ontario 7	Alberta Griu	Grid	Brunswick	NOVA SCOLIA	IUIAL			
2018 Written Premium	413,190	189,665	101,307	17,486	39,593	761,241			
Change from 2017	36,538	27,501	6,660	4,168	11,215	86,082			
% Change from 2017	9.7%	17.0%	7.0%	31.3%	39.5%	12.7%			
2018 Earned Premium	382,147	184,393	97,354	15,974	35,242	715,110			
Change from 2017	7,285	33,981	1,101	5,193	16,392	63,952			
% Change from 2017	1.9%	22.6%	1.1%	48.2%	87.0%	9.8%			

As a result, projection comparisons related to the operating result attributed to current accident year is better achieved through key ratio comparisons as will be discussed later in this section.

The components of the projection for 2018 compared with the same components for the two



projections for **2017** show a higher level of similarity with the *Sep 28 2016 Outlook* in relation to the operating result attributed to prior accident years (PAYs) at the RSP level, whereas the **2018** "attributed CAY" components are generally more aligned with the *Aug 31 2017 Projections*. These alignments are to be expected, as the **2018** projection for the contribution of the prior accident years has the same base assumption for the prior accident years as found in the *Sep 28 2016 Outlook* (i.e. no "nominal" changes in claims liabilities, so the prior accident years impact is driven by releases of actuarial present value adjustments as claims are settled), whereas the *Aug 31 2017 Projections* includes actual prior accident year activity included up to the Jun 30, 2017 valuation. In contrast, the updated valuation and more recent discount rate assumptions leads to closer alignment with the *Aug 31 2017 Projections* (updated yield curves and updated accident years 2017 and 2018 loss ratios), such that remaining differences are driven by differences in volume and loss ratios.

The table below provides the difference between the 2018 calendar year results and the 2017 results as currently projected (*Aug 31 2017 Projections*).

Projection Summary –2018 less 2017 Calendar Year Amounts (\$000s) – current projections

Trojection Summary 201	current pro	jecuons						
	2018 less 2017 Calendar Year Projections (\$000s)							
	Ontario	Alberta Grid	Alberta Non-	New	Nova Scotia	TOTAL		
	Ontario	Alberta Grid	Grid	Brunswick	NOVA SCOLIA	TOTAL		
Written Premium	36,538	27,501	6,660	4,168	11,215	86,082		
Earned Premium	7,285	33,981	1,101	5,193	16,392	63,952		
Prior Accident Years (PAYs)	79,340	(15,810)	(1,711)	2,139	4,622	68,580		
Current Accident Year (CAY)	19,091	30,093	985	3,752	15,994	69,915		
Total Claims Incurred	98,431	14,283	(726)	5,891	20,616	138,495		
Expense Allowance	9,948	9,515	2,748	762	3,177	26,150		
Change in Prem. Def / (DPAC)	15,733	(6,987)	(2,860)	674	1,082	7,642		
Underwriting Expenses	25,681	2,528	(112)	1,436	4,259	33,792		
	-	-	-	-	-	-		
Net U/Wing gain / (loss)	(116,827)	17,170	1,939	(2,134)	(8,483)	(108,335)		
Administrative Expense	455	233	56	205	519	1,468		
Operating Result	(117,282)	16,937	1,883	(2,339)	(9,002)	(109,803)		
attributed to PAYs:	(79,340)	15,810	1,711	(2,139)	(4,622)	(68,580)		
attributed to CAY:	(37,942)	1,127	172	(200)	(4,380)	(41,223)		

The table above shows variations in the current written premium projections for calendar years 2018 vs 2017, with **all RSPs showing <u>increases</u>**. The written changes also generate changes for earned premium, expenses, and the current accident year claims. However, volume changes do not impact differences in prior accident years (both projections assume no nominal changes). While we believe our claims liabilities estimates are "best estimates", potential variances are discussed below.

The table at the top of the next page summarizes differences in key ratios for projections for calendar year 2018 vs 2017.



Projection Summary –2018 less 2017 Calendar Year (Key Ratios) – current projections

	2018 less 2017	' Calendar Yea	Projections (Ke	ey Ratios)		
	Ontario	Alberta Grid	Alberta Non- Grid	New Brunswick	Nova Scotia	TOTAL
Loss Ratios (% EP)						
Prior Accident Years (PAYs)	21.3%	(9.7%)	(1.7%)	20.6%	26.0%	11.1%
Current Accident Year (CAY)	2.5%	(1.4%)	(0.3%)	(1.4%)	(0.3%)	(1.0%)
Total Claims Incurred	23.8%	(11.1%)	(2.0%)	19.2%	25.7%	10.2%
Expense Ratios						
Expense Allowance (% WP)	(0.3%)	0.8%	0.8%	(3.2%)	(0.8%)	0.1%
Chg in Prem. Def / (DPAC) (% EP)	4.1%	(4.9%)	(3.0%)	6.8%	4.2%	0.8%
Underwriting Expenses (% EP)	6.1%	(5.5%)	(0.4%)	(1.1%)	(8.4%)	1.8%
Administrative Expense (% EP)	0.1%	-	-	(0.8%)	(0.7%)	0.1%
U/Wing & Admin Exp (% EP)	6.2%	(5.5%)	(0.4%)	(1.9%)	(9.1%)	1.9%
Combined Operating Ratio (% EP)	30.0%	(16.6%)	(2.4%)	17.3%	16.6%	12.1%
attributed to PAYs:	21.3%	(9.7%)	(1.7%)	20.6%	26.0%	11.1%
attributed to CAY:	8.7%	(6.9%)	(0.7%)	(3.3%)	(9.4%)	1.0%

As a reminder, PAYs for 2018 have no projected "undiscounted" impact, as we assume our liabilities are best estimates – the 2017 projection includes implemented valuation impacts for 2017. The "effect of discounting" for 2017 also reflects valuation impacts (particularly apv releases with nominal releases) not expected for 2018.

It is also important to keep in mind when considering the operating results for the RSPs as shown in the two preceding tables that they do not include all expenses – for example, premium taxes are applied at member companies based on their share of RSPs' written premium – these expenses are not included here. As such, the Combined Operating Ratio may not be comparable to a member's own such ratio. Similarly, operating cash flows are shared immediately among members – as such, there is no investment income included in the RSP operating results, although members may generate such income on RSP generated operating cash flows for their own accounts.

Policy liabilities (made up of claims liabilities and premium liabilities) are carried on an actuarial present value basis (that is, adjusted for the time value of money, and include provisions for adverse deviation). It is informative to consider how claims liabilities fair during a calendar year relative to their beginning provisions for adverse development. To provide some historical context, the development of prior accident years' claims liabilities over the ensuing calendar year is discussed below.

For the Ontario RSP, nominal (i.e. excluding actuarial present value adjustments) claims liabilities amounted to \$838.7 million as at December 31, 2016 (representing then the beginning prior accident years' claims liabilities for calendar year 2017). The nominal prior accident years' change booked year-to-date during 2017 at \$49.7 million (favourable) represents 5.9% of the beginning claims liabilities. The nominal claims liabilities for the Ontario RSP are projected to be \$896.3 million at December 31, 2017 (and hence is the projected beginning prior accident years' claims liabilities for calendar year 2018), and **changes of** +/-5% (\$44.8 million) of these liabilities would not be unusual (see table below for actual changes that occurred during the last 3 calendar years). The projected



nominal claims development provision for adverse deviation (PfAD) is \$142.1 million. The projected nominal claims liabilities at December 31, 2018<sup>5</sup> are \$987.0 million (nominal claims development PfAD of \$165.8 million), with the increases in claims liabilities driven by volume increases.

ON RSP PAYs' Ultimate Changes vs Beginning Liabilities (nominal, indemnity only)

	nominal unpaid indemnity claims liability (\$ millions)								
	nominal	beginning a	mounts	chg in PAYs	' ultimates				
ON	unpaid	PfAD for	MfAD for	2022104	%				
ON	indemnity	dev'l	dev'l	amount	beginning				
	[1]	[2]	[3]	[4]	[5]				
Cal Yr	mthly calc	mthly calc	=[2]/[1]	mthly calc	=[4]/[1]				
actuals									
2014	1,025.5	179.8	17.5%	(91.0)	(8.9%)				
2015	1,005.5	181.5	18.1%	(146.2)	(14.5%)				
2016	889.6	147.1	16.5%	(70.5)	(7.9%)				
projections									
2017	838.7	133.7	15.9%	(49.7)	(5.9%)				
2018	896.3	142.1	15.9%	-	-				

For the Alberta Grid RSP, nominal claims liabilities amounted to \$281.5 million as at December 31, 2016 (representing then the beginning prior accident years' claims liabilities for calendar year 2017). The nominal prior accident years' change booked year-to-date during 2017 at \$19.7 million (unfavourable) represents 7.0% of the beginning liabilities. The nominal claims liabilities for the Alberta Grid RSP are projected to be \$305.0 million at December 31, 2017 (and hence is the projected beginning prior accident years' claims liabilities for calendar year 2018), and changes of +/-5% (\$15.3 million) of these liabilities would not be unusual (see table at the top of the next page for actual changes that occurred during the last 3 calendar years). The projected nominal claims development provision for adverse deviation (PfAD) is \$34.8 million. The projected nominal claims liabilities at December 31, 2018<sup>6</sup> are \$318.4 million (nominal claims development PfAD of \$36.7 million).

<sup>&</sup>lt;sup>5</sup>Note: the table provides beginning balances, so the ending balance at December 31, 2018 is NOT shown in the table.

<sup>&</sup>lt;sup>6</sup>See prior footnote.



#### AB Grid RSP PAYs' Ultimate Changes vs Beginning Liabilities (nominal, indemnity only)

	nomina	nominal unpaid indemnity claims liability (\$ millions)								
	nominal	beginning a	mounts	chg in PAYs	' ultimates					
AD Code	unpaid	PfAD for	MfAD for	200 2000	%					
AB Grid	indemnity	dev'l	dev'l	amount	beginning					
	[1]	[2]	[3]	[4]	[5]					
Cal Yr	mthly calc	mthly calc	=[2]/[1]	mthly calc	=[4]/[1]					
actuals										
2014	264.3	25.9	9.8%	30.0	11.4%					
2015	268.8	30.6	11.4%	(4.1)	(1.5%)					
2016	243.8	27.3	11.2%	41.2	16.9%					
projections										
2017	281.5	32.0	11.4%	19.7	7.0%					
2018	305.0	34.8	11.4%	-	-					

For the Alberta non-Grid RSP, nominal claims liabilities amounted to \$169.4 million as at December 31, 2016 (representing then the beginning prior accident years' claims liabilities for calendar year 2017). The nominal prior accident years' change booked year-to-date during 2017 at \$4.8 million (unfavourable) represents 2.8% of the beginning liabilities. The nominal claims liabilities for the Alberta non-Grid RSP are projected to be \$177.7 million at December 31, 2017 (and hence is the projected beginning prior accident years' claims liabilities for calendar year 2018), and changes of +/-5% (\$8.9 million) of these liabilities would not be unusual (see table below for actual changes that occurred during the last 3 calendar years). The projected nominal claims development provision for adverse deviation (PfAD) is \$20.2 million. The projected nominal claims liabilities at December 31, 2018<sup>7</sup> are \$179.4 million (nominal claims development PfAD of \$20.4 million).

AB non-Grid RSP PAYs' Ultimate Changes vs Beginning Liabilities (nominal, indemnity only)

	nomina	nominal unpaid indemnity claims liability (\$ millions)							
	nominal	beginning a	mounts	chg in PAYs	' ultimates				
AB non-	unpaid	PfAD for	MfAD for	amaunt	%				
Grid	indemnity	dev'l	dev'l	amount	beginning				
	[1]	[2]	[3]	[4]	[5]				
Cal Yr	mthly calc	mthly calc	=[2]/[1]	mthly calc	=[4]/[1]				
actuals									
2014	147.9	14.4	9.7%	5.4	3.7%				
2015	159.5	18.2	11.4%	(6.9)	(4.3%)				
2016	159.5	18.2	11.4%	2.3	1.4%				
projections									
2017	169.4	19.4	11.5%	4.8	2.8%				
2018	177.7	20.2	11.4%	-	-				

<sup>&</sup>lt;sup>7</sup>See prior footnote.

\_



For the New Brunswick RSP, nominal claims liabilities amounted to \$18.0 million as at December 31, 2016 (representing then the beginning prior accident years' claims liabilities for calendar year 2017). The nominal prior accident years' change booked year-to-date during 2017 at \$1.6 million (favourable) represents 8.9% of the beginning liabilities. The nominal claims liabilities for the New Brunswick RSP are projected to be \$17.0 million at December 31, 2017 (and hence is the projected beginning prior accident years' claims liabilities for calendar year 2018), and **changes of** +/-5% (\$0.9 million) of these liabilities would not be unusual (see table below for actual changes that occurred during the last 3 calendar years). The projected *nominal* claims development provision for adverse deviation (PfAD) is \$1.9 million. The projected nominal claims liabilities at December 31, 2018<sup>8</sup> are \$19.6 million (*nominal* claims development PfAD of \$2.2 million).

NB RSP PAYs' Ultimate Changes vs Beginning Liabilities (nominal, indemnity only)

	nomina	nominal unpaid indemnity claims liability (\$ millions)								
	nominal	nominal beginning amounts chg in PAYs' u								
	unpaid	PfAD for	MfAD for		%					
NB	indemnity	dev'l	dev'l	amount	beginning					
	[1]	[2]	[3]	[4]	[5]					
Cal Yr	mthly calc	mthly calc	=[2]/[1]	mthly calc	=[4]/[1]					
actuals										
2014	13.9	1.8	12.9%	1.2	8.6%					
2015	16.0	2.1	13.1%	0.9	5.6%					
2016	19.0	2.5	13.2%	(2.2)	(11.6%)					
projections										
2017	18.0	2.0	11.1%	(1.6)	(8.9%)					
2018	17.0	1.9	11.2%	-	-					

For the Nova Scotia RSP, nominal claims liabilities amounted to \$32.7 million as at December 31, 2016 (representing then the beginning prior accident years' claims liabilities for calendar year 2017). The nominal prior accident years' change booked year-to-date during 2017 at \$3.6 million (favourable) represents 11.0% of the beginning liabilities. The nominal claims liabilities for the Nova Scotia RSP are projected to be \$33.9 million at December 31, 2017 (and hence is the projected beginning prior accident years' claims liabilities for calendar year 2018), **changes of** +/-5% (\$1.7 million) of these liabilities would not be unusual (see table below for actual changes that occurred during the last 3 calendar years). The projected *nominal* claims development provision for adverse deviation (PfAD) is \$4.0 million. The projected nominal claims liabilities at December 31, 2018<sup>9</sup> are \$49.2 million (*nominal* claims development PfAD of \$5.8 million), with the increases in claims liabilities driven by volume increases.

<sup>&</sup>lt;sup>8</sup>See prior footnote.

<sup>&</sup>lt;sup>9</sup>See prior footnote.



#### NS RSP PAYs' Ultimate Changes vs Beginning Liabilities (nominal, indemnity only)

	nominal unpaid indemnity claims liability (\$ millions)									
	nominal	beginning a	mounts	chg in PAYs	' ultimates					
NS	unpaid indemnity	PfAD for dev'l	MfAD for dev'l	amount	% beginning unpaid					
	[1]	[2]	[3]	[4]	[5]					
Cal Yr	mthly calc	mthly calc	=[2]/[1]	mthly calc	=[4]/[1]					
actuals										
2014	18.8	2.7	14.4%	1.8	9.6%					
2015	23.4	3.4	14.5%	0.4	1.7%					
2016	27.3	3.9	14.3%	0.5	1.8%					
projections										
2017	32.7	3.9	11.9%	(3.6)	(11.0%)					
2018	33.9	4.0	11.8%	-	_					

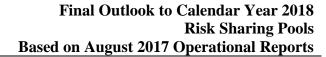
In addition, **changes in yield curves** used to determine the discount rates used in our projections are subject to change by RSP. For example, the *Sep 28 2016 Outlook* for the Ontario RSP used a discount rate of 0.68%, whereas with the *Aug 31 2017 Projections* for the Ontario RSP we are now using 1.23%. However, the Jun 30, 2017 valuation discount rate *changes* do not have a direct impact on the 2018 projections. As the changes occurs in calendar year **2017**, both the beginning and ending claims liabilities for calendar year **2018** are adjusted, so the impact is effectively nullified (that is, a change in discount rate has a significant impact only when it is implemented). The same is true for margin changes (the impact of any changes is significant only when implemented).

The projected December 31, 2018 policy liability discount amounts are:

- ON RSP: \$46.6 million (associated interest rate PfAD of \$8.9 million, indicating the net discount impact of approximately \$37.7 million)
- AB Grid RSP: \$13.5 million (associated interest rate PfAD of \$2.9 million, indicating the net discount impact of approximately \$10.6 million)
- AB non-Grid RSP: \$7.3 million (associated interest rate PfAD of \$1.5 million, indicating the net discount impact of approximately \$5.8 million)
- NB RSP: \$0.8 million (associated interest rate PfAD of \$0.2 million, indicating the net discount impact of approximately \$0.6 million)
- NS RSP: \$2.2 million (associated interest rate PfAD of \$0.5 million, indicating the net discount impact of approximately \$1.7 million)

Moving the net discount impacts to \$0 could be considered a "worst case" scenario 10 in relation to

<sup>&</sup>lt;sup>10</sup>That is, the "worst case" scenario would be if the discount rate moves to 0% - we assume at this level the margin would be moved to 0 as well. In addition to the net discount impact indicated, there would also be an adverse movement in the claims development provision for adverse deviation, as this provision is also carried on a "net present value" or "discounted" basis.





adverse changes in the yield curves.

Key Ratios associated with our calendar year **2018** projection are presented in the table at the top of the next page, including the Combined Operating Ratios for the two calendar year **2017** projections. For details related to the **2018** projections, please refer to Exhibits B-1 through B-5. The basis for the projection of premiums, claims amounts and expenses is described in Section 3. In particular, premium projections are discussed in section 3.1 and claims projections are discussed in section 3.2. Our projections of the number of vehicle transfers are based on projections provided by major users of the RSPs. However, RSP volumes can change rapidly in a short period of time, as we have seen in the past, as member groups can transfer their entire limit for a given year at any time throughout the year including, for example, the last day of that year. As a result, volumes may change dramatically from those projected here.

We did consider whether the Canadian risk-free yield curve would move into negative territory (i.e. that the "worst case" scenario would involve a negative discount rate, rather than a 0 discount rate). While this is *possible*, we do not believe it is *plausible* within the next 18-21 months, given the current economic environment in Canada.



Projection Summary - Calendar Year 2018 - Key Ratios<sup>11</sup>

	Calendar	Year 2018 Proj	jections (Key Ra	tios)		
	Ontario	Alberta Grid	Alberta Non- Grid	New Brunswick	Nova Scotia	TOTAL
Loss Ratios (% EP)	-	-	-	-	-	-
Prior Accident Years (PAYs)	(7.5%)	(3.9%)	(4.5%)	(1.7%)	(1.6%)	(5.7%)
Current Accident Year (CAY)	135.2%	94.6%	115.1%	75.1%	98.0%	118.8%
Total Claims Incurred	127.7%	90.7%	110.6%	73.4%	96.4%	113.1%
	-	-	-	-	-	-
Expense Ratios	-	-	-	-	-	-
Expense Allowance (% WP)	29.9%	29.7%	29.7%	28.6%	30.2%	29.8%
Chg in Prem. Def / (DPAC) (% EP)	5.8%	1.0%	2.4%	(1.3%)	1.7%	3.7%
Underwriting Expenses (% EP)	38.1%	31.5%	33.3%	30.0%	35.7%	35.5%
Administrative Expense (% EP)	0.5%	0.7%	1.0%	5.6%	3.9%	0.9%
U/Wing & Admin Exp (% EP)	38.6%	32.2%	34.3%	35.6%	39.6%	36.4%
2018 Combined Operating Ratio (% EP)	166.3%	122.9%	144.9%	109.0%	136.0%	149.5%
attributed to PAYs:	(7.5%)	(3.9%)	(4.5%)	(1.7%)	(1.6%)	(5.7%)
attributed to CAY:	173.8%	126.8%	149.4%	110.7%	137.6%	155.2%
2017 Combined Operating Ratio						
Sep 28, 2016 Outlook	169.8%	101.2%	131.4%	122.4%	138.1%	142.8%
attributed to PAYs:	(8.0%)	(5.2%)	(4.1%)	(3.5%)	(4.8%)	(6.4%)
attributed to CAY:	177.8%	106.4%	135.5%	125.9%	142.9%	149.2%
Aug 31, 2017 Projection	136.3%	139.5%	147.3%	91.7%	119.4%	137.4%
attributed to PAYs:	(28.8%)	5.8%	(2.8%)	(22.3%)	(27.6%)	(16.8%)
attributed to CAY:	165.1%	133.7%	150.1%	114.0%	147.0%	154.2%

Net cash flows from operations for the RSPs collectively are projected to be an overall <u>outflow</u> of \$134.0 million for calendar year **2018** as presented in detail in section 3.5 (we are currently projecting a \$130.1 million operating cash outflow for calendar year 2017).

Operating cash outflows are funded by members, and the primary drivers of operating cash are premium collection and claims payments. The tables at the top of the next page summarize RSP operating cash flows over the last 6 calendar years (historic operating cash flows by RSP can be found in section 3.5).

<sup>&</sup>lt;sup>11</sup>RSP operating results do not include all expenses – for example, premium taxes and health levies are applied at member companies based on their share of RSP written premium or vehicle counts as applicable – these expenses are not included here. As such, the Combined Operating Ratio may not be comparable to a member's own such ratio.



# ALL RSPs Historic Operating Cash Flows by Share Year RSP All RSPs

\$millions	Share (i.e. Calendar) Year					
	2016	2015	2014	2013	2012	2011
written premium	609.1	489.0	545.9	518.0	576.1	584.9
expense allowance	183.2	142.9	164.2	152.8	170.6	168.8
administration	4.1	4.0	3.7	4.0	4.0	4.5
prem net of expenses	421.9	342.1	378.0	361.2	401.4	411.6
paid claims						
PAYs indemnity	296.3	295.3	283.7	293.2	277.4	311.4
PAY claims expenses	33.4	32.4	35.0	33.9	30.9	35.5
CAY indemnity	197.7	182.3	170.9	165.1	161.0	169.2
CAY clms expenses	0.8	0.9	1.4	1.5	1.6	2.0
all yrs indemnity	494.1	477.6	454.6	458.3	438.4	480.6
all yrs clms expenses	34.2	33.2	36.4	35.4	32.6	37.5
total claims & expenses paid	528.2	510.8	491.0	493.8	470.9	518.1
operating cash flow	(106.4)	(168.7)	(112.9)	(132.6)	(69.5)	(106.5)

values are carried in table to 3 decimals - rounding differences may result

The current (Aug 31 2017) calendar year **2017 projection** is provided in more detail in the next section. As indicated in the table at the top of the next page, higher claims payments are the main driver of cash flow differences between the calendar year **2018 projection** and the current calendar year **2017 projection** (Aug 31 2017). In general, increases in written premium (net of cash expenses at \$58.5 million) is more than offset by the expected increases in projected claims payments, leading to the overall increase in projected 2018 calendar year cash <u>outflows</u> over the projected 2017 calendar year cash outflows. Changes for the Ontario RSP are the primary driver of overall changes.



Projection Summary –2018 less 2017 Calendar Year Cash Flow Projections (\$000s)

2018 les	ss 2017 Calend	lar Net Operat	ing Cash Flow P	rojections (\$00	00s)	
	Ontario	Alberta Grid	Alberta Non- Grid	New Brunswick	Nova Scotia	TOTAL
Written Premium	36,538	27,501	6,660	4,168	11,215	86,082
PAYs Paid Claims						
paid indemnity	22,634	3,794	(732)	358	585	26,639
paid allowed claims expense	5,877	1,706	956	(127)	(77)	8,336
PAYs Paid Claims	28,511	5,500	224	231	508	34,975
CAYs Paid Claims						
paid indemnity	5,394	13,634	2,660	1,407	4,136	27,231
paid allowed claims expense	55	55	8	3	17	138
CAYs Paid Claims	5,449	13,689	2,668	1,410	4,153	27,369
All AYs Paid Claims						
paid indemnity	28,028	17,428	1,928	1,765	4,721	53,870
paid allowed claims expense	5,932	1,761	964	(124)	(60)	8,474
All AYs Paid Claims	33,960	19,189	2,892	1,641	4,661	62,344
"Cash" Expenses						
Member Expense Allowance	9,948	9,515	2,748	762	3,177	26,150
Administrative Expenses	455	233	56	205	519	1,468
"Cash" Expenses	10,403	9,748	2,804	967	3,696	27,618
Net Operating Cash Flow	(7,826)	(1,437)	965	1,560	2,857	(3,880)

# Projections for Calendar Year 2017

The tables on the next page provide summaries for the Aug 31 2017 Projection of calendar year 2017.



Projection Summary -2017 Calendar Year Amounts (\$000s) - current projection

	Calendar Year 2017 Projections (\$000s)							
	Ontario	Alberta Grid	Alberta Non- Grid	New Brunswick	Nova Scotia	TOTAL		
Written Premium	376,652	162,164	94,647	13,318	28,378	675,159		
Earned Premium	374,862	150,412	96,253	10,781	18,850	651,158		
Prior Accident Years (PAYs)	(108,040)	8,663	(2,681)	(2,404)	(5,202)	(109,664)		
Current Accident Year (CAY)	497,576	144,375	111,085	8,252	18,530	779,818		
Total Claims Incurred	389,536	153,038	108,404	5,848	13,328	670,154		
Expense Allowance	113,593	46,817	27,341	4,239	8,783	200,773		
Change in Prem. Def / (DPAC)	6,327	8,865	5,160	(878)	(472)	19,002		
Underwriting Expenses	119,920	55,682	32,501	3,361	8,311	219,775		
	-	-	-	-	-	-		
Net U/Wing gain / (loss)	(134,594)	(58,308)	(44,652)	1,572	(2,789)	(238,771)		
Administrative Expense	1,528	980	917	686	865	4,976		
2017 Operating Result	(136,122)	(59,288)	(45,569)	886	(3,654)	(243,747)		
attributed to PAYs:	108,040	(8,663)	2,681	2,404	5,202	109,664		
attributed to CAY:	(244,162)	(50,625)	(48,250)	(1,518)	(8,856)	(353,411)		

Projection Summary -2017 Calendar Year (Key Ratios) - current projection

	Calendar Year 2017 Projections (Key Ratios)							
	Ontario	Alberta Grid	Alberta Non- Grid	New Brunswick	Nova Scotia	TOTAL		
Loss Ratios (% EP)						_		
Prior Accident Years (PAYs)	(28.8%)	5.8%	(2.8%)	(22.3%)	(27.6%)	(16.8%)		
Current Accident Year (CAY)	132.7%	96.0%	115.4%	76.5%	98.3%	119.8%		
Total Claims Incurred	103.9%	101.8%	112.6%	54.2%	70.7%	102.9%		
Expense Ratios Expense Allowance (% WP) Chg in Prem. Def / (DPAC) (% EP) Underwriting Expenses (% EP) Administrative Expense (% EP) U/Wing & Admin Exp (% EP)	30.2% 1.7% 32.0% 0.4% 32.4%	28.9% 5.9% 37.0% 0.7% 37.7%	28.9% 5.4% 33.7% 1.0% 34.7%	31.8% (8.1%) 31.1% 6.4% 37.5%	31.0% (2.5%) 44.1% 4.6% 48.7%	29.7% 2.9% 33.7% 0.8% 34.5%		
2017 Combined Operating Ratio (% EP)	136.3%	139.5%	147.3%	91.7%	119.4%	137.4%		
attributed to PAYs:	(28.8%)	5.8%	(2.8%)	(22.3%)	(27.6%)	(16.8%)		
attributed to CAY:	165.1%	133.7%	150.1%	114.0%	147.0%	154.2%		

As indicated in the tables at the top of the next page, there have been changes both to earned premium and the Combined Operating Ratios (COR) between the *Sep 28 2016 Outlook* and the *Aug 31 2017 Projections* as summarized above, the latter of which includes the implementation of the 2016 Q3, Q4 and 2017 Q1, Q2 valuations, with the changes in operating result largely driven by the impact of the updated valuations on CORs.



#### Calendar Year 2017 Sep 28 2016 Outlook vs current Aug 31 2017 Projection

	Outlook Posted September 28, 2016				Updated	Year-end Pro	jection
\$000s	Earned Premium	Operating Result	COR		Earned Premium	Operating Result	COR
Ontario	342,151	(193,336)	156.5%	_	374,862	(136,122)	136.3%
Alberta Grid	179,590	(24,198)	113.5%		150,412	(59,288)	139.5%
Alberta non-Grid	97,853	(32,148)	132.9%		96,253	(45,569)	147.3%
New Brunswick	10,399	(1,643)	115.8%		10,781	886	91.7%
Nova Scotia	15,564	(5,700)	136.7%		18,850	(3,654)	119.4%
TOTAL	645,557	(257,025)	139.8%		651,158	(243,747)	137.4%

In the first table below, we attribute the overall \$13.3 million operating result improvement in our projection for calendar year 2017 to components:

- \$15.3 million *deterioration* to the change in earned premium (by multiplying the earned premium change by [1 COR]);
- \$28.6 million *improvement* attributed to the change in COR (which is driven by changes in nominal prior accident year claims liabilities, current accident year loss ratios, the next future accident year loss ratio impact on premium liabilities, discount rates and margins, and expenses).

#### Changes in Projections for Calendar Year 2017

	Total Change (Updated Year-end Projection less Outlook)			Change Att Earned P Cha	remium	Change Attributed t COR Change		
\$000s	Earned Premium	Operating Result	COR		Earned Premium	Operating Result	Operating Result	COR
Ontario	32,711	57,214	(20.2%)		32,711	(18,482)	75,696	(20.2%)
Alberta Grid	(29,178)	(35,090)	26.0%		(29,178)	3,939	(39,029)	26.0%
Alberta non-Grid	(1,600)	(13,421)	14.4%		(1,600)	526	(13,947)	14.4%
New Brunswick	382	2,529	(24.1%)		382	(60)	2,589	(24.1%)
Nova Scotia	3,286	2,046	(17.3%)		3,286	(1,206)	3,252	(17.3%)
TOTAL	5,601	13,278	(2.4%)	_	5,601	(15,283)	28,561	(2.4%)

Of the \$13.3 million<sup>12</sup> of operating result improvement shown above (of which \$28.6 million is attributed to changes in COR), \$26.5 million is directly related to changes in the projection of claims incurred amounts as indicated in the table at the top of the next page, which is further broken down into the changes in the current and prior accident years, showing that the Ontario RSP increase in current accident year claims (due to increased volume) is more than offset by favourable prior accident year impacts (driven through valuation updates of ultimates).

<sup>&</sup>lt;sup>12</sup>Changes in the projection of the current accident year incurred are impacted by changes in earned premium, hence the comparison to the overall change in operating result, rather than focusing on that component attributed to COR only.



#### Changes in Claims Incurred Projections for Calendar Year 2017

2017 Calendar Yr	Claim	Claims Incurred \$m  Current Accident Year Claims Incurred \$m  Incurred \$m  Incurred \$m						laims	
Risk Sharing Pool	Aug 31 2017 Projection	Sep 28 2016 Outlook	change	Aug 31 2017 Projection	Sep 28 2016 Outlook	change	Aug 31 2017 Projection	Sep 28 2016 Outlook	change
Ontario	389.5	422.9	(33.4)	497.6	453.0	44.6	(108.0)	(30.1)	(77.9)
Alberta Grid	153.0	149.2	3.8	144.4	156.3	(11.9)	8.7	(7.1)	15.7
Alberta Non-Grid	108.4	100.9	7.5	111.1	105.4	5.7	(2.7)	(4.4)	1.8
New Brunswick	5.8	8.1	(2.2)	8.3	8.5	(0.2)	(2.4)	(0.4)	(2.0)
Nova Scotia	13.3	15.5	(2.2)	18.5	16.3	2.2	(5.2)	(0.8)	(4.4)
TOTAL	670.2	696.7	(26.5)	779.8	739.5	40.4	(109.7)	(42.8)	(66.9)

Where our 2017 Final Outlook projections of the 2017 CORs were above 100% (true for all RSPs), a lower projected earned premium generates a favourable change in operating result (i.e. Alberta Grid and Non-Grid RSPs), whereas a higher projected earned premium generates an <u>unfavourable change</u> in operating result (i.e. all other RSPs). While this seems to suggest that "earned premium" drives results, this dynamic really reflects the view of earned premium as a proxy for earned exposure to claims (i.e. it really reflects changes in earned vehicle transfers increasing or decreasing).

What remains after adjusting for changes in earned premium is then due to changes in 2017 CORs. As indicated in the preceding tables, updated projections show improving 2017 CORs for the Ontario, New Brunswick, and Nova Scotia RSPs.

The key drivers of changes in COR are the selected ultimate loss ratios and the discount rates, updated with each valuation <sup>13</sup>. More information on the results of valuations and the associated impacts are available in the Actuarial Highlights for August 2016 (implementation of the 2016 Q2 valuation), October 2016 (implementation of the 2016 Q3 valuation), March 2017 (implementation of the 2016 Q4 valuation), May 2017 (implementation of the 2017 Q1 valuation), and August 2017 (implementation of the 2017 Q2 valuation).

Included in the valuation assumptions were updated selected discount rates, and the impact of any changes are reflected in the claims incurred changes indicated in the table above. The selected discount rates have <u>increased</u> from those selected with the 2016 Q2 valuation (the basis for the 2017 Final Outlook), resulting in a <u>decrease</u> in the actuarial liabilities and having a favourable impact on the projected operating results for calendar year 2018, accounting for an estimated \$27.4 million of favourable operating result change overall (see table at the top of the next page). As there have been no changes to margins for adverse deviations (MfADs) for investment return relative to the 2017 Q1 valuation, there is no associated impact.

<sup>&</sup>lt;sup>13</sup>Changes to selected margins for adverse deviation at a valuation would also have an impact on the results – however, selected margins do not typically change with each valuation.



Estimated 2017 Operating Result Impact from Discount Rate Changes

RSP	2017 Final Outlook	Aug 31 2017 Projection	Est. Impact Discount Rate	Est. Impact MfAD Chg*
Ontario	0.68%	1.23%	-\$17.4 million	\$0.0 million
Alberta Grid	0.60%	1.19%	-\$5.7 million	\$0.0 million
Alberta Non-Grid	0.61%	1.20%	-\$3.4 million	\$0.0 million
New Brunswick	0.57%	1.17%	-\$0.3 million	\$0.0 million
Nova Scotia	0.56%	1.17%	-\$0.6 million	\$0.0 million
TOTAL			-\$27.4 million	\$0.0 million

Source: Estimated from Interest Rate Sensitivity Tables found in the August 2017 Actuarial Highlights \*Interest Rate MfADs have not changed and remain at 25 basis points.

The 2017 Q2 valuation did include updated selections of claims development MfADs at the RSP/coverage/accident half level (generally reductions in the MfADs selected), resulting in a decrease in the actuarial liabilities and having a favourable impact on the projected operating results for calendar year 2017, accounting for an estimated \$13.2 million of favourable operating result change overall (see table below).

Estimated 2017 Operating Result Impact from Claims Development MfADs changes

RSP	Est. Impact MfAD Chg*
Ontario	-\$11.8 million
Alberta Grid	-\$0.9 million
Alberta Non-Grid	-\$0.5 million
New Brunswick	-\$0.0 million
Nova Scotia	-\$0.1 million
TOTAL	-\$13.2 million

Source: FA internal data.

Based on the two preceding tables, overall, there has been a \$40.6 million favourable impact due to the <u>increase</u> in the risk-free yield curve (generating <u>increased</u> interest rates used for discounting) and changes in margins for adverse deviations (which varied by RSP, accident year, and coverage, but were generally decreases where changes were made).

That is to say, **the projected 2017 net operating deficit** of \$243.7 million (being a \$13.3 million improvement relative to the 2017 Outlook) **would have been \$40.6 million worse** (i.e. \$284.3 million) or a \$27.3 million deterioration from the 2017 Outlook, **if not for the change in the yield curve and changes in selected MfADs**.



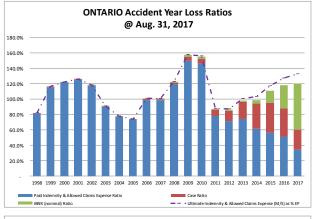
#### 2.4 Outlook Purpose and Projection Uncertainty

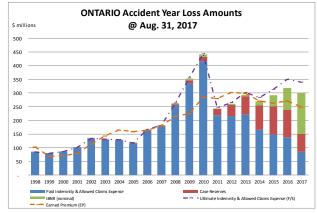
This Outlook was prepared for the Member companies of Facility Association to assist them in estimating their share of RSP results for planning purposes. It is not intended, nor is it necessarily suitable, for any other purpose.

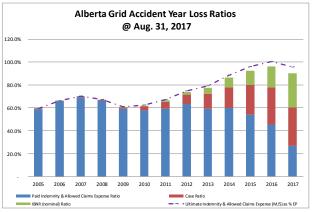
Unless specifically noted in this document, no explicit provision has been made for causes of loss which are not already reflected in the historical data, nor for otherwise unforeseen changes to the legal or economic environment in which claims are settled, including changes in the interpretation of existing legislation or regulation on matters currently before the courts.

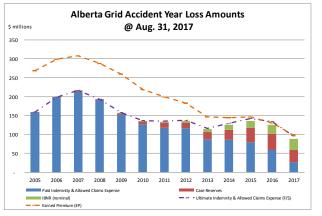
This Outlook is a projection of future events based on models and assumptions believed to be realistic simplifications of the real world, but as simplifications, inherent uncertainty exists in relation to how actual events will unfold relative to these projections. The user of this Outlook should recognize that future Operating Results may deviate from these projections by material amounts.

The historical loss ratios for the RSPs (left charts) and dollar amount of volume changes (right charts) for the RSPs are provided below to provide some historical context. Note that the scales differ by chart.













#### 2.5 Definitions and Presentation

#### Accounting Periods

- Calendar Year 2016: actual results for 12 months ending December 31, 2016.
- Calendar Year 2017: actual results for 8 months ending August 31, 2017, plus projected results for 4 months ending December 31, 2017.
- ➤ Calendar Year 2018: projected results for 12 months ending December 31, 2018.



#### **Definitions**

- Claim Liabilities are made up of case reserves and provision for Incurred but not Recorded claims amounts ("IBNR").
- ➤ <u>Premium Liabilities</u> are made up of unearned premiums, and Premium Deficiency Reserves or Deferred Policy Acquisition Costs ("DPAC") as applicable.
- ➤ <u>Policy Liabilities</u> are comprised of claim liabilities and premium liabilities.
- Actuarial Present Value Adjustments include the recognition of the time value of money and includes explicit provisions for adverse deviations ("PFAD") as applicable.
- Actuarial Provisions encompass all claim liabilities other than case reserves, and all premium liabilities other than unearned premiums. As such, they include IBNR, and premium deficiency/(DPAC) as applicable.
- ➤ (Calendar Period) Claims Incurred are computed as the sum of calendar period paid claims amounts and calendar period changes in claim liabilities. While the majority of claims adjustment expenses are included in the Expense Allowances paid to member companies, there are allowed amounts in addition to the level included in the allowance. These amounts are shown as "paid expenses" in Monthly Operational Reports and are included with paid indemnity for valuation purposes, and for presentation of Operating Results.

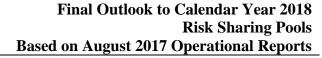
#### Data Sources & Related Valuations

- Actual results are taken from Operational Reports up to and including the month of August 2017. The August 2017 Operational Report reflects the results of recent valuations as at June 30, 2017 as described in the August 2017 Actuarial Highlights.
- ➤ <u>Projected results</u> for the months of September 2017 and October 2017 are the projections reflected in the August 2017 Operational Reports, and are based on assumptions derived for this purpose from the valuations at June 30, 2017 and other information.
- ➤ <u>Projected results</u> for the months of November 2017 through December 2018 are also based on assumptions derived for this purpose from the valuations as at June 30, 2017 and other information, extended to encompass calendar year 2018.

#### **Format**

The Outlook presentation of Operating Results is consistent with the "Summary of Operations" exhibits attached to monthly bulletins to Members.

- "Claims Incurred" are divided between amounts pertaining to prior accident years, and those pertaining to the current accident year.
- "Claims Incurred" are further divided between nominal (i.e. "undiscounted") incurred claims, and calendar period changes in the effect of actuarial present value adjustments (i.e. "discounting"). As our claims liabilities are estimated on a "best estimate" basis, there are no nominal incurred amounts projected for prior accident years. The effect of actuarial present value adjustments include the "unwinding" or "release" of the actuarial present value adjustments as claims payments are made, the addition of the actuarial present value adjustments pertaining to increases in claim liabilities, and changes in discount rate and





margins for adverse deviations, if any.

- ➤ "Change in Premium Deficiency / (Deferred Policy Acquisition Costs)" is divided between the change in the nominal (or "undiscounted") premium deficiency / (deferred policy acquisition costs), and calendar period changes in the effect actuarial present value adjustments ("discounting") akin to those in relation to claims liabilities.
- ➤ The "Net Result from Operations" excludes costs incurred directly by Members (e.g. premium tax, health levies, association dues), and any investment income that Member companies might earn on assets they hold in support of their RSP liabilities.
- ➤ "Ratios" are expressed relative to calendar period earned premiums, unless otherwise indicated.



#### 3. Basis for Projections

The commentary that follows describes the basis for projecting premiums, claims amounts, and expenses, and provides summaries of key assumptions. Exhibit A in Section 4 provides additional detail regarding these assumptions.

#### 3.1 Premiums

For each RSP, a model has been established to project by month the number of (annualized) vehicles being transferred to the pools and to project the associated average written premium (with projected premium being the product of these two). The projection model for each RSP considers the largest member company groups individually and sums the results of the projections at the member company group level (with an "all other" catch all). Select individual large member company groups were provided with their own results by RSP to populate with their own projections <sup>14</sup>. The final projections leverage this detailed projection information, as well as additional insight provided by member company project managers to Facility Association Member Services staff and by Facility Association management's judgment otherwise.

Written premium projection volatility is highlighted in the table below in relation to the Ontario RSP to provide an example of how aggregate written premium projections can change over a relatively short period of time.

Ontario RSP Calendar Year Written Premium Projections (millions) over time

Calendar Year	Preliminary 2017 Outlook	Final 2017 Outlook	Preliminary 2018 Outlook	Final 2018 Outlook
2016	\$324.9	\$321.9	\$336.1	\$336.1
2017	\$354.7	\$342.2	\$353.8	\$376.7
2018	not projected	not projected	\$327.6	\$413.2

Source: FA Outlooks. Preliminary Outlooks are based on data as at May of the preceding year, whereas the Final Outlook is based on August data from the preceding year. For example, the Preliminary and Final 2018 Outlooks were based on actual and projected results as at May 2017 and August 2017 respectively.

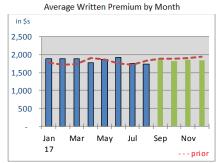
Summaries of the projections are provided at the top of the next page for 2017 and 2018. In the charts, blue columns are actuals and green are projections. The dotted red line represents the values from the prior year. Please take careful note of the scale in each chart, as we modify the scale to best fit the information being presented.

<sup>&</sup>lt;sup>14</sup>This process is updated quarterly – where a member changes their projection significantly from the previous quarter, FA management will ask the member to provide confirmation of the accuracy and reasonableness of the projection, but FA does not ask for, nor receive, information from members related to the "why" of their projections or changes of their projections, as this is deemed confidential.



#### Ontario 2017 projected count 203,979; approximate maximum that could be transferred: 377,000







Ontario 2018 projected count 219,457; approximate maximum that could be transferred: 377,000

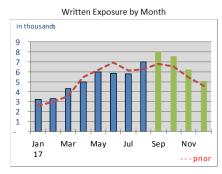


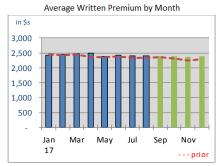




Alberta Grid 201<u>7</u>

projected count **67,275**; approximate maximum that could be transferred: unknown (based on number of risks subject to Grid rating – approximately 152,000 in 2016)







Alberta Grid 2018

projected count **76,403**; approximate maximum that could be transferred: unknown (based on number of risks subject to Grid rating–approximately 152,000 in 2016)



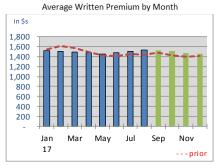






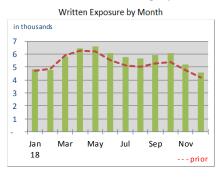
#### Alberta Non-Grid 2017 projected count 63,278; approximate maximum that could be transferred: 103,000







Alberta Non-Grid 2018 projected count 67,932; approximate maximum that could be transferred: 103,000

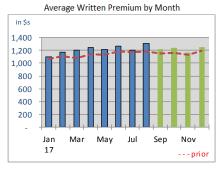






New Brunswick 2017 projected count 10,868; approximate maximum that could be transferred: 40,000

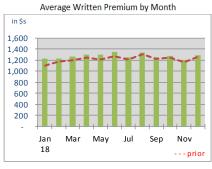






New Brunswick 2018 projected count 13,689; approximate maximum that could be transferred: 40,000



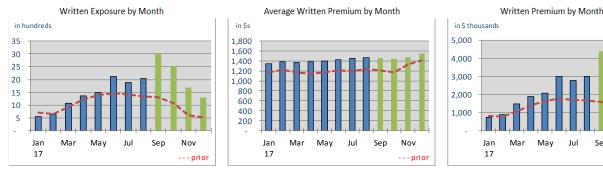




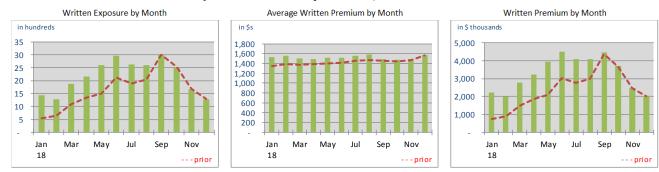


Nova Scotia 2017

projected count 19,685; approximate maximum that could be transferred: unknown (based on number of risks deemed "inexperienced")



Nova Scotia 2018 projected count 26,009; approximate maximum that could be transferred: unknown (based on number of risks deemed "inexperienced")



Monthly earned premium was projected based on the known duration of the current unearned premium and from projected written premium based on the estimated average duration of policies.

The table below summarizes the 2018 projected written and earned premium, and the change in both related to the current projection for 2017.

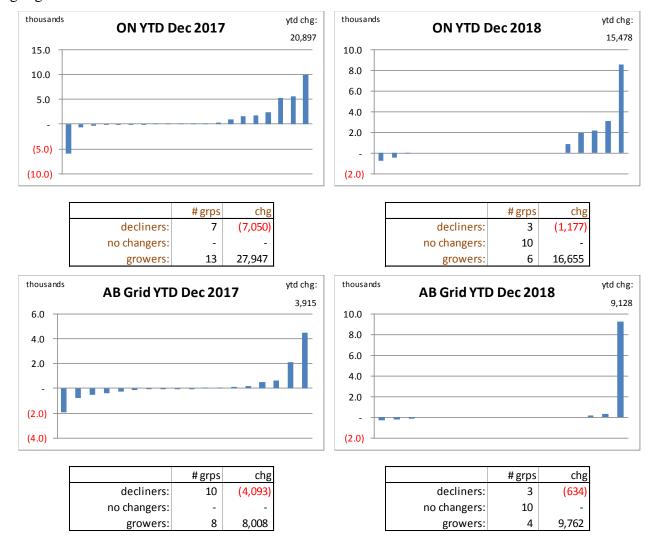
Calendar Year 2018 Premium Comparisons (Amounts in \$000s)							
	Ontario	Alberta Grid	Alberta Non-	New	Nova Scotia	TOTAL	
	Ontario Alberta Gr		Grid B	Brunswick	NOVA SCOLIA	TOTAL	
2018 Written Premium	413,190	189,665	101,307	17,486	39,593	761,241	
Change from 2017	36,538	27,501	6,660	4,168	11,215	86,082	
% Change from 2017	9.7%	17.0%	7.0%	31.3%	39.5%	12.7%	
2018 Earned Premium	382,147	184,393	97,354	15,974	35,242	715,110	
Change from 2017	7,285	33,981	1,101	5,193	16,392	63,952	
% Change from 2017	1.9%	22.6%	1.1%	48.2%	87.0%	9.8%	

As usual, and as discussed in the opening, our projected vehicle counts and projected written premium is largely provided by significant RSP users. Projection updates are requested from the larger users quarterly, and FA management follows-up for confirmation of projected amounts where significant changes in a member's projections occur (FA does not ask for nor receive information on the "why" of a member projection, as this is viewed as confidential – management simply asks for confirmation that the member themselves believe the projection to be reasonable).



For example, while there were 19 active<sup>15</sup> member groups identified for the Ontario RSP, the 9 member groups providing explicit projections account for 96% of the Ontario RSP vehicle counts transferred for the 12-month period ending August 2017. For the Alberta Grid RSP, while there were 17 active member groups identified, the 7 member groups that provided explicit projections account for 86% of the Alberta Grid RSP vehicle counts transferred for the 12-month period ending August 2017.

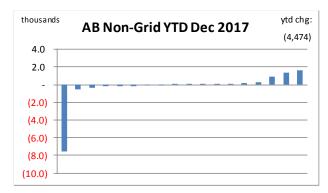
To provide some additional perspective on the projections, we've provided year-end projections summaries of the "decliners / growers" charts akin to those provided monthly in the Actuarial Highlights.



<sup>&</sup>lt;sup>15</sup>We consider a member group to be "active" if they have non-zero transfer counts in at least 1 month in the current or prior calendar year. Members that are under common management for transfer limit purposes are considered a single "member group".

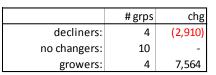


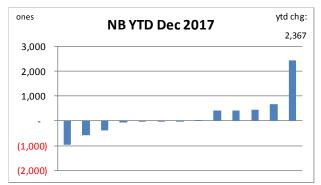
#### Final Outlook to Calendar Year 2018 Risk Sharing Pools Based on August 2017 Operational Reports





	# grps	chg
decliners:	8	(9,006)
no changers:	-	-
growers:	10	4,532

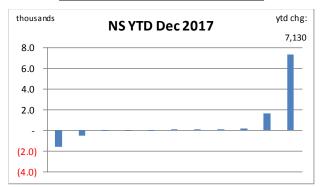






	# grps	chg
decliners:	7	(2,082)
no changers:	-	-
growers:	6	4,448

	# grps	chg
decliners:	1	(57)
no changers:	7	-
growers:	5	2,878



thousan	NS YTD Dec 2018	ytd chg:
	113 1 13 3 200 2010	6,324
4.0 -		
3.0 -		
2.0 -		
1.0 -		
(1.0) -		

	# grps	chg
decliners:	5	(2,184)
no changers:	-	-
growers:	6	9,315

	# grps	chg
decliners:	2	(368)
no changers:	4	-
growers:	4	6.692



#### 3.2 Claims Amounts

The most recent valuation of the policy liabilities of the RSPs was based on RSP experience at June 30, 2017. As per the Facility Association's regular process, key elements of the valuations were reviewed with the Actuarial Committee, and presented to, and discussed with, the Audit & Risk Committee. The results were reflected in the August 2017 Operational Reports and discussed in the associated Actuarial Highlights.

For accident year ("AY") 2018, the estimated nominal loss ratios reflected in the RSP Outlook are "a priori" or "expected" loss ratios modeled based on the June 30, 2017<sup>16</sup> valuation selections of ultimate claims incurred, augmented with updated estimated impacts of historical changes in average earned premium (particularly that attributed to rate changes), and historical claims amount levels (including loss cost trends and product reforms). It is important to note that 2018 is built from the 2017 a priori loss ratio – **not** from the current selected ultimate loss ratio for accident year 2017. The a priori loss ratios are estimated at the coverage level and summed to arrive at the all coverages level.

a priori (aka "expected") Loss Ratio Comparisons								
	Ontario	Alberta Grid	Alberta Non-	New	Nova Scotia	TOTAL		
	Ontario	Alberta Griu	Grid	Brunswick				
Accident Year 2017 a priori LR	118.8%	88.0%	107.8%	71.2%	91.2%	JUK.		
						t 6/e		
divide by ep factor	1.002	1.024	1.022	1.017	1.028	<sup>in</sup> tentionally left blank		
multiply by clms factor	1.033	1.046	1.047	1.030	1.042	Me		
multiply by rounding correction	1.000	1.000	1.000	1.000	1.000	$t_{i}^{i}$		
						<sup>[e</sup> η;		
Accident Year 2018 a priori LR	122.5%	89.9%	110.4%	72.1%	92.4%	1,0		

For the sake of brevity in presentation, we've included a single table displaying the accident year loss ratios used in the projections, as well as charts showing loss ratios by accident half-year, rolled up to the government line and total levels (a priori loss ratio selections are made at the coverage and accident half-year level).

<sup>&</sup>lt;sup>16</sup>The a priori loss ratios are derived at the start of the valuation process, prior to updating for current actual results. The ultimates used for this process are based on the most recently completed valuations. For roll-forward valuations, a priori LRs are not always updated, but rather brought forward from the prior full valuation. Hence, the a priori loss ratios used for the Jun 30, 2017 valuation reflected selections of ultimate from the Mar 31, 2017 valuation for all RSPs.



#### Final Outlook to Calendar Year 2018 Risk Sharing Pools Based on August 2017 Operational Reports

#### Selected Loss Ratios – table 1

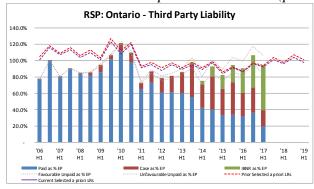
Loss Ratios		RSP ON			RSP AB Grid			RSP AB Non-Grid		
Accident		Sel Ult in	Selected		Sel Ult in	Selected		Sel Ult in	Selected	
Year	EP in \$000s	\$000s	LR	EP in \$000s	\$000s	LR	EP in \$000s	\$000s	LR	
1993	92,972	105,016	113.0%	-	-	-	-	-	-	
1994	200,791	211,431	105.3%	-	-	-	-	-	-	
1995	235,451	206,331	87.6%	-	-	-	-	-	-	
1996	197,412	170,282	86.3%	-	-	-	-	-	-	
1997	152,922	111,264	72.8%	-	-	-	-	-	-	
1998	103,106	84,627	82.1%	-	-	-	-	-	-	
1999	68,831	80,125	116.4%	-	-	-	-	-	-	
2000	69,659	85,019	122.1%	-	-	-	-	-	-	
2001	80,047	100,983	126.2%	-	-	-	-	-	-	
2002	113,770	134,636	118.3%	-	-	-	-	-	-	
2003	142,680	130,474	91.4%	-	-	-	-	-	-	
2004	165,860	129,273	77.9%	47,289	24,418	51.6%	558	1,948	349.1%	
2005	158,965	117,540	73.9%	268,327	159,371	59.4%	24,923	24,233	97.2%	
2006	163,889	165,741	101.1%	298,764	198,129	66.3%	73,870	64,439	87.2%	
2007	180,957	182,294	100.7%	308,227	216,282	70.2%	70,464	71,648	101.7%	
2008	214,486	263,028	122.6%	287,816	192,830	67.0%	76,379	77,276	101.2%	
2009	224,095	352,716	157.4%	259,276	157,374	60.7%	71,792	68,200	95.0%	
2010	284,366	441,618	155.3%	219,036	135,521	61.9%	72,937	61,504	84.3%	
2011	280,096	244,238	87.2%	200,109	133,691	66.8%	78,509	65,563	83.5%	
2012	301,958	260,735	86.3%	183,227	135,418	73.9%	77,275	78,417	101.5%	
2013	299,210	293,585	98.1%	146,827	113,884	77.6%	81,132	80,673	99.4%	
2014	270,940	267,850	98.9%	144,701	125,307	86.6%	84,032	94,885	112.9%	
2015	262,816	291,406	110.9%	146,710	135,409	92.3%	89,816	93,026	103.6%	
2016	270,894	319,417	117.9%	131,096	125,676	95.9%	90,266	107,305	118.9%	
2017			119.9%			90.2%			109.9%	
2018			122.5%			89.9%			110.4%	
2019			127.0%			91.9%			113.4%	
	exp allowance:	future s	ervice cost:	exp allowance:	future s	ervice cost:	exp allowance:	future s	ervice cost:	
prem liab										
(FY2017)	29.50%		0.24%	28.90%		0.29%	28.90%		0.47%	
prem liab										
(FY2018)	29.90%		0.24%	29.70%		0.32%	29.70%		0.48%	

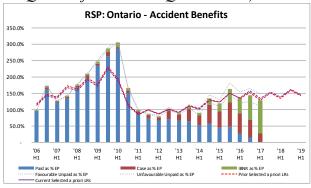


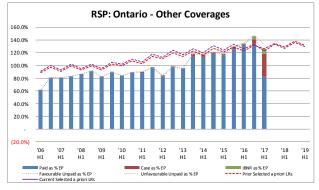
#### Selected Loss Ratios – table 2

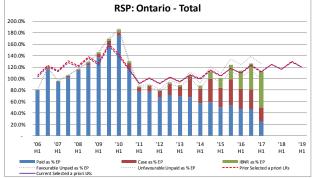
Loss Ratios		RSP NB				RSP NS	
Accident	EP in \$000s	Sel Ult in	Selected		EP in \$000s	Sel Ult in	Selected
Year	EP III \$000S	\$000s	LR		EP III \$000S	\$000s	LR
2005	4,932	4,145	84.0%		-	-	-
2006	11,215	5,969	53.2%	_	-	-	-
2007	12,451	9,003	72.3%		2,057	1,116	54.3%
2008	12,180	9,356	76.8%		10,620	7,285	68.6%
2009	13,459	10,562	78.5%		14,065	9,024	64.2%
2010	11,900	7,528	63.3%		14,454	10,737	74.3%
2011	10,010	8,351	83.4%		12,312	11,198	91.0%
2012	10,052	5,754	57.2%	_	13,196	14,150	107.2%
2013	10,403	7,038	67.7%		13,787	12,189	88.4%
2014	9,542	6,517	68.3%		13,172	11,165	84.8%
2015	10,189	6,522	64.0%	_	14,032	11,029	78.6%
2016	10,048	6,642	66.1%		14,898	12,400	83.2%
2017			72.4%				92.1%
2018			72.1%				92.4%
2019			73.2%				94.9%
	exp allowance:	future se	ervice cost:	ex	cp allowance:	future se	ervice cost:
prem liab							
(FY2017)	31.90%		2.55%		31.00%		1.75%
prem liab							
(FY2018)	28.60%		2.55%		30.20%		1.75%

#### Ontario – Actual and a priori Loss Ratios (per 2017 Q1 used for the 2017 Q2 valuation)



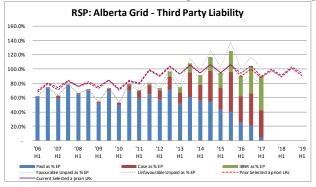


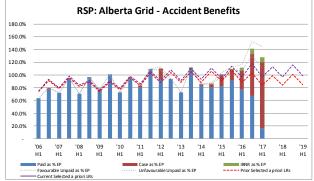


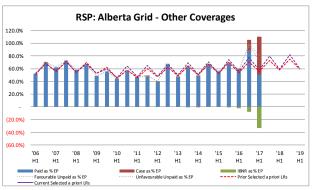


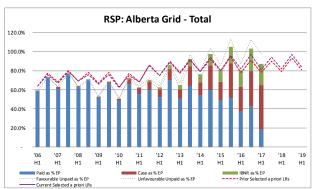


Alberta Grid – Actual and a priori Loss Ratios (per 2017 Q1 used for the 2017 Q2 valuation)

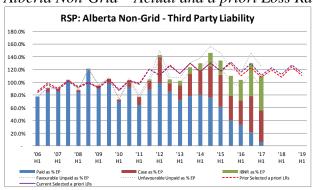


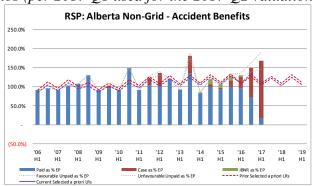


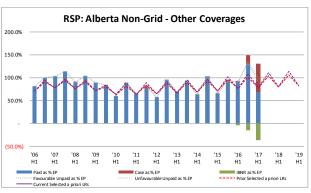


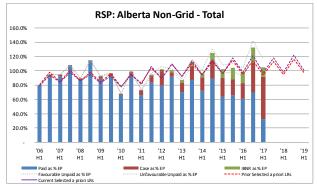


Alberta Non-Grid – Actual and a priori Loss Ratios (per 2017 Q1 used for the 2017 Q2 valuation)

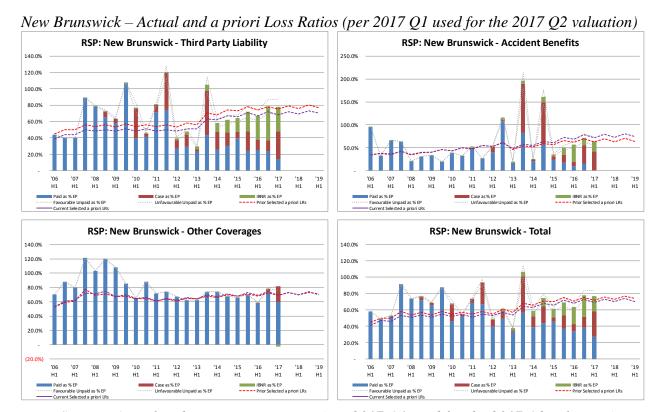


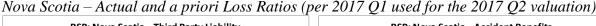


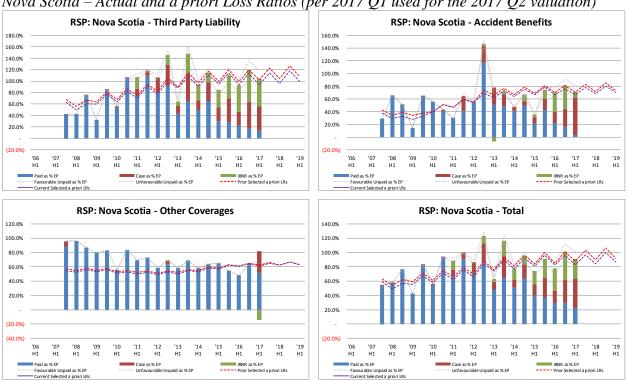












The operating results for calendar year 2017 include actual development on accident years 2016 and prior incurred claims amounts, up to and including activity in the month of August 2017. No further

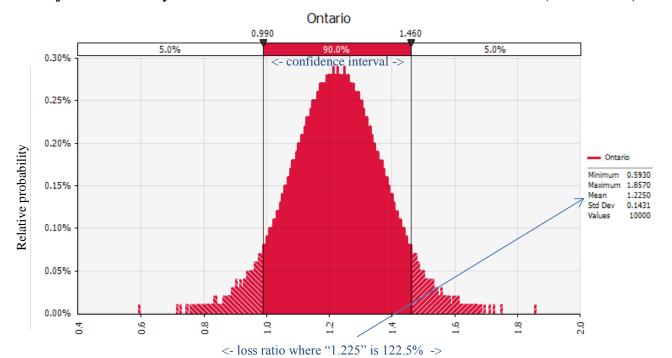


nominal development (favourable or <u>unfavourable</u>) is projected for the remainder of the calendar year (actuarial present value adjustments are expected to change as nominal claims liabilities are unwound with claims settlement). Similarly, no nominal prior accident year development is projected during calendar year 2018, but actuarial present value adjustment changes are projected to occur as claims liabilities are unwound. The discount rates and margins for adverse development are unchanged throughout the projection period.

#### 3.3 Simulated 2018 Accident Year Nominal Loss Ratio

The overall "normal course" nominal loss ratio for accident year 2018 for each RSP could be modelled using a normal distribution with a mean set at the a priori loss ratio and standard deviations<sup>17</sup> based on our a priori loss ratios (indemnity only) by accident half for 2006-2015 put onlevel, and smoothed. This would not necessarily take into account "stress" events and users are strongly urged to consider "stress" scenarios in addition to these "normal course" simulated loss ratios. Further, this assumes that the baseline a priori estimates will prove to be the "best estimate" loss ratio for accident year 2018 – this estimate may change over time due to modelling differences and changes in historical loss ratios etc. that are used to derive this estimate.

Histograms for the loss ratio modeling by RSP for accident year 2018 is presented below based on latin hypercube sampling (10,000 samples) using @risk simulation software, and, again, assuming loss ratios follow a normal distribution under "non-stressed" scenarios.

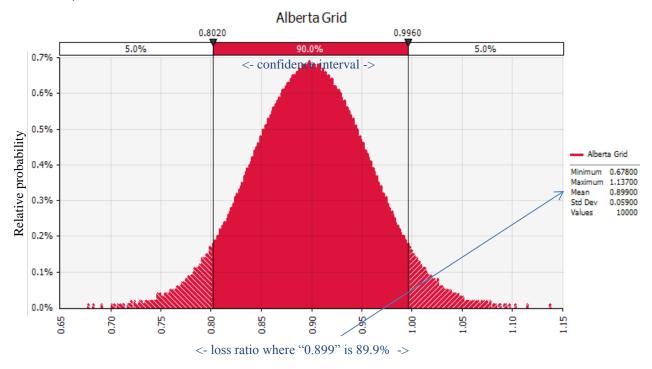


Projection Summary - Ontario RSP Accident Year 2018 Nominal Loss Ratio (non-stressed)

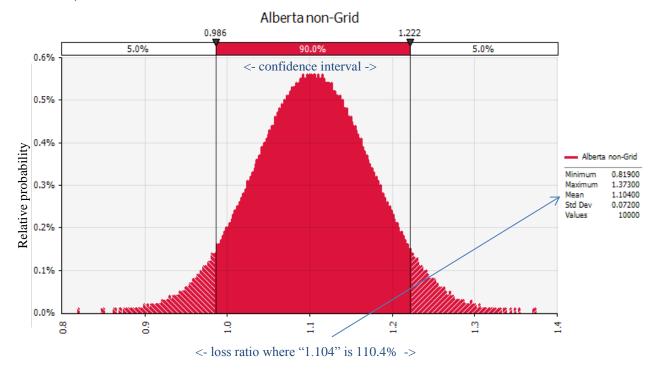
<sup>&</sup>lt;sup>17</sup>These standard deviations are estimated from on-level a priori loss ratios for each RSP under "base line" assumptions – not "stressed" assumptions.



### Projection Summary – Alberta Grid RSP Accident Year 2018 Nominal Loss Ratio (non-stressed)

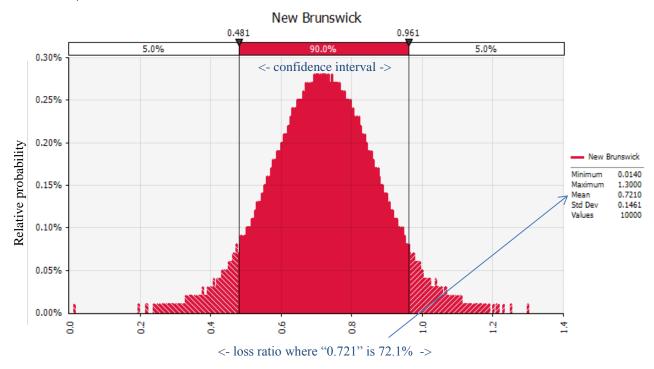


Projection Summary – Alberta Non-Grid RSP Accident Year 2018 Nominal Loss Ratio (non-stressed)

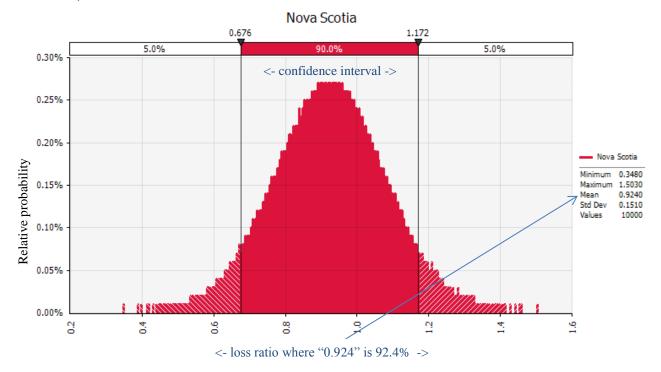




### Projection Summary – New Brunswick RSP Accident Year 2018 Nominal Loss Ratio (non-stressed)



Projection Summary - Nova Scotia RSP Accident Year 2018 Nominal Loss Ratio (nonstressed)



The above histograms of simulated results for the RSPs' 2018 accident year nominal loss ratios were



based on simulated (generated) loss ratios assuming the base line loss ratios and associated standard deviations as presented in the next table.

#### Projection Summary - Accident Year 2018 Nominal Loss Ratio - Generator Assumptions

**Facility Association** 

a priori LRs - distribution estimates

for valuation: Jun 30, 2017

RSP: **ALL** Amounts in: \$1,000s

	2018 From Projection			From a pri	ori Model	Scenario Claims	
Jurisdiction	EP	CAY Loss Ratios (nominal)	CAY claims	Loss Ratio CV	estimated Loss Ratio std dev	generated claims	generated Claims Ratio
Ontario	382,147	122.5%	468,130	11.7%	14.3%	468,130	122.5%
Alberta Grid	184,393	89.9%	165,769	6.6%	5.9%	165,769	89.9%
Alberta non-Grid	97,354	110.4%	107,479	6.5%	7.2%	107,479	110.4%
New Brunswick	15,974	72.1%	11,517	20.2%	14.6%	11,517	72.1%
Nova Scotia	35,242	92.4%	32,564	16.3%	15.1%	32,564	92.4%
ALL	715,110	109.8%	785,459	5.1%	5.6%	785,459	109.8%

Please see section 3.2 for a priori loss ratios and associated charts by RSP.

#### 3.4 Expenses

Expense allowances are the amounts paid to Members as a percentage of (written) premiums transferred to an RSP, in respect of commissions and other underwriting expenses, as well as claims adjustment expenses. The expense allowance ratios applied to the estimated premiums transferred during calendar year 2018 were selected as follows:

- ➤ Ontario RSP. The expense allowance ratios vary by Member, subject to a maximum (as approved annually by the FA Board) with the calendar year 2017 maximum communicated to Members in Bulletin F16-065 and the calendar year 2018 maximum via Bulletin F17-068.
- *Other RSPs.* The expense allowances for each calendar year and RSP are approved annually by the FA Board. The calendar year 2017 ratios are those approved for calendar year 2017, as communicated to Members in Bulletins F16-066 (Alberta), F16-067 (New Brunswick), and F16-068 (Nova Scotia). The calendar year 2018 ratios are those as communicated in Bulletins F17-069 (Alberta), F17-070 (New Brunswick), and F17-071 (Nova Scotia).

The table at the top of the next page summarizes the approved expense factors by RSP.



RSP / Jurisdiction	Approved Expense Factor CY 2018	Approved Expense Factor CY 2017	Comments
Ontario (expense cap)	32.0% with prof fee ratio increased to 3.0%	32.0%	no change in cap, but increase the professional fee offset by 1 point to 3.0% estimated effective expense ratio assumption is 30.2% for CY 2017 and 29.9% for CY 2018
Alberta	29.7%	28.9%	increase by 0.8 percentage points mainly due to increase in assumed ratio for acquisition, underwriting, and admin expenses
New Brunswick	28.6%	31.9%	decrease by 3.3 percentage points mainly due to claims expense ratio changes
Nova Scotia	30.2%	31.0%	decrease by 0.8percentage points mainly due to increase in assumed ratio for claims adjudication professional fees offset

Calendar year 2018 changes in premium deficiency / (deferred policy acquisition costs) are estimated by applying loss ratios and future servicing cost ratios to the starting and ending projected unearned premiums. The underlying premium deficiency ratios were derived on the basis of the expected loss ratios for accident year 2018 and 2019 as applicable, and expected future servicing costs estimated at the rate of 50% of administration expenses. Where the sum of these ratios was less than 100% (i.e. thus giving rise to an asset rather than a liability), the asset value was capped on the basis of the expense allowance ratio.

Administration Expenses for calendar year 2018 were projected as percentages of written premiums based on actual expenses-to-written premium ratios in recent years.

Calendar Year 2018 Expense Ratio Projections									
	Ontario	Alberta Grid	Alberta Non-	New	Nova Scotia	TOTAL			
	Untario	Alberta Grid	Grid Brunsw	Brunswick					
Expense Allowance (% WP)	29.9%	29.7%	29.7%	28.6%	30.2%	29.8%			
Administrative Expense (% WP)	0.5%	0.6%	1.0%	5.1%	3.5%	0.8%			
prem def / (dpac) (% UP)	41.8%	(1.2%)	21.5%	(19.2%)	3.8%	n/a			

#### 3.5 Operating Cash Flows

Net cash flows from operations for the RSPs are projected to be an overall <u>outflow</u> of \$134.0 million for calendar year **2018** as presented in the table at the top of the next page. Differences between the calendar year **2018** projection and the calendar year **2017** projections are minor, notwithstanding the increase in premium for 2018 over 2017, largely as claims payments are also expected to increase in



2018 over 2017. Should volumes not change during 2018 as anticipated or payments prove higher than expected, net operating cash flows would be adversely impacted.

Projection Summary - Calendar Year 2018 - Net Operating Cash Flows

Calen	dar Year 2018	Net Operating	Cash Flow Proj	ections (\$000s	5)	
	Ontario	Alberta Grid	Alberta Non- Grid	New Brunswick	Nova Scotia	TOTAL
Written Premium	413,190	189,665	101,307	17,486	39,593	761,241
PAYs Paid Claims						
paid indemnity	202,775	82,560	49,989	3,408	6,879	345,611
paid allowed claims expense	27,232	6,800	3,667	253	469	38,421
PAYs Paid Claims	230,007	89,360	53,656	3,661	7,348	384,032
CAYs Paid Claims						
paid indemnity	145,986	62,741	51,971	5,287	9,892	275,877
paid allowed claims expense	1,475	252	156	11	40	1,934
CAYs Paid Claims	147,461	62,993	52,127	5,298	9,932	277,811
All AYs Paid Claims						
paid indemnity	348,761	145,301	101,960	8,695	16,771	621,488
paid allowed claims expense	28,707	7,052	3,823	264	509	40,355
All AYs Paid Claims	377,468	152,353	105,783	8,959	17,280	661,843
"Cash" Expenses						
Member Expense Allowance	123,541	56,332	30,089	5,001	11,960	226,923
Administrative Expenses	1,983	1,213	973	891	1,384	6,444
"Cash" Expenses	125,524	57,545	31,062	5,892	13,344	233,367
2018 Net Operating Cash Flow	(89,802)	(20,233)	(35,538)	2,635	8,969	(133,969
2017 Net Operating Cash Flow						
Sep 28, 2016 Outlook	(62,312)	(16,200)	(15,536)	(782)	(2,305)	(97,135
Aug 31, 2017 Projection	(81,976)	(18,796)	(36,503)	1,075	6,112	(130,089

Net operating cash flows are settled with members monthly based on their premium / claims payments transferred to the RSPs and for shares by accident year of the overall cash flows.

Historic net operating cash flows by RSP are presented in the tables that follow for reference.



### Ontario RSP Historic Operating Cash Flows by Share Year RSP Ontario

\$millions	Share (i.e. Calendar) Year							
	2016	2015	2014	2013	2012	2011		
written premium	336.1	239.0	278.6	277.6	308.7	297.2		
expense allowance	99.7	70.5	87.0	84.1	90.9	85.8		
administration	1.3	1.3	1.2	1.4	1.4	1.3		
prem net of expenses	235.0	167.2	190.4	192.1	216.4	210.1		
paid claims								
PAYs indemnity	177.7	165.8	155.1	163.6	163.1	200.7		
PAY claims expenses	24.3	23.4	25.5	24.5	21.3	26.5		
CAY indemnity	101.5	87.7	80.9	80.9	71.2	73.2		
CAY clms expenses	0.5	0.5	1.1	1.2	1.2	1.7		
all yrs indemnity	279.2	253.5	235.9	244.5	234.3	273.9		
all yrs clms expenses	24.8	23.9	26.6	25.7	22.5	28.2		
total claims & expenses paid	303.9	277.4	262.5	270.2	256.9	302.1		
operating cash flow	(68.9)	(110.2)	(72.2)	(78.1)	(40.4)	(92.0)		

values are carried in table to 3 decimals - rounding differences may result

### Alberta Grid RSP Historic Operating Cash Flows by Share Year RSP Alberta Grid

\$millions		Sł	nare (i.e. Cale	ndar) Year		
_	2016	2015	2014	2013	2012	2011
written premium	148.5	138.3	155.8	135.9	160.3	191.6
expense allowance	44.7	39.1	44.4	38.1	47.0	54.8
administration	0.9	0.8	0.8	0.8	0.8	1.0
prem net of expenses	102.8	98.3	110.6	96.9	112.5	135.8
paid claims						
PAYs indemnity	68.7	79.4	81.3	84.9	74.8	80.5
PAY claims expenses	5.6	5.7	6.1	6.2	6.8	6.4
CAY indemnity	39.5	47.2	42.5	42.7	51.8	55.7
CAY clms expenses	0.1	0.2	0.2	0.2	0.3	0.2
all yrs indemnity	108.3	126.6	123.8	127.6	126.5	136.2
all yrs clms expenses	5.7	5.9	6.3	6.3	7.1	6.6
total claims & expenses paid	114.0	132.5	130.1	133.9	133.6	142.8
operating cash flow	(11.1)	(34.2)	(19.5)	(37.0)	(21.2)	(7.0)

values are carried in table to 3 decimals - rounding differences may result



### Alberta Non-Grid RSP Historic Operating Cash Flows by Share Year RSP Alberta Non-Grid

\$millions		SI	hare (i.e. Cale	ndar) Year		
_	2016	2015	2014	2013	2012	2011
written premium	99.7	86.0	88.4	81.9	80.8	75.8
expense allowance	30.0	24.3	25.2	23.0	23.7	21.7
administration	0.9	0.8	0.8	0.8	0.8	0.9
prem net of expenses	68.8	60.9	62.5	58.1	56.3	53.1
paid claims						
PAYs indemnity	42.5	41.8	39.0	33.8	31.4	25.3
PAY claims expenses	2.5	2.4	2.5	2.4	2.1	2.0
CAY indemnity	49.7	40.0	40.5	34.2	31.0	33.1
CAY clms expenses	0.1	0.1	0.1	0.1	0.1	0.1
all yrs indemnity	92.1	81.9	79.5	68.1	62.4	58.4
all yrs clms expenses	2.6	2.5	2.6	2.5	2.3	2.1
total claims & expenses paid	94.8	84.4	82.1	70.6	64.7	60.5
operating cash flow	(26.0)	(23.5)	(19.7)	(12.5)	(8.4)	(7.3)

values are carried in table to 3 decimals - rounding differences may result

### New Brunswick RSP Historic Operating Cash Flows by Share Year RSP New Brunswick

\$millions		S	hare (i.e. Cale	ndar) Year		
_	2016	2015	2014	2013	2012	2011
written premium	9.7	11.2	9.5	9.6	11.3	9.0
expense allowance	3.4	3.9	3.1	3.2	3.9	2.9
administration	0.5	0.5	0.5	0.5	0.6	0.7
prem net of expenses	5.8	6.8	5.9	5.9	6.9	5.4
paid claims						
PAYs indemnity	2.6	2.5	3.1	5.3	3.2	3.0
PAY claims expenses	0.4	0.5	0.5	0.5	0.5	0.5
CAY indemnity	3.2	3.4	3.0	2.9	2.7	2.9
CAY clms expenses	0.0	0.0	0.0	0.0	0.0	0.0
all yrs indemnity	5.8	6.0	6.1	8.2	5.9	5.9
all yrs clms expenses	0.4	0.5	0.5	0.5	0.5	0.5
total claims & expenses paid	6.3	6.5	6.7	8.8	6.4	6.3
operating cash flow	(0.4)	0.2	(0.7)	(2.9)	0.5	(0.9)

values are carried in table to 3 decimals - rounding differences may result



### Nova Scotia RSP Historic Operating Cash Flows by Share Year RSP Nova Scotia

\$millions		S	hare (i.e. Cale	ndar) Year		
_	2016	2015	2014	2013	2012	2011
written premium	15.2	14.5	13.6	13.0	15.0	11.4
expense allowance	5.3	5.0	4.5	4.4	5.1	3.7
administration	0.5	0.5	0.4	0.5	0.5	0.5
prem net of expenses	9.4	9.0	8.7	8.2	9.4	7.1
paid claims						
PAYs indemnity	4.9	5.8	5.2	5.6	5.0	1.9
PAY claims expenses	0.6	0.3	0.3	0.3	0.2	0.1
CAY indemnity	3.8	3.9	4.0	4.4	4.2	4.3
CAY clms expenses	0.0	0.0	0.0	0.0	0.0	0.0
all yrs indemnity	8.7	9.7	9.2	10.0	9.2	6.2
all yrs clms expenses	0.6	0.3	0.3	0.3	0.2	0.2
total claims & expenses paid	9.3	10.0	9.5	10.4	9.4	6.4
operating cash flow	0.1	(1.1)	(0.9)	(2.2)	(0.1)	0.8

values are carried in table to 3 decimals - rounding differences may result



#### 4. EXHIBITS

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

#### **EXHIBIT A** Key Assumptions (counts, premium, loss ratios)

- A-1 Ontario
- A-2 Alberta Grid
- A-3 Alberta Non-Grid
- A-4 New Brunswick
- A-5 Nova Scotia

#### **EXHIBIT B** RSP Outlook – Summary of Operations

- **B-1** Ontario
- B-2 Alberta Grid
- B-3 Alberta Non-Grid
- **B-4** New Brunswick
- B-5 Nova Scotia

#### **EXHIBIT C** RSP Outlook – Projected Policy Liabilities

- C-1 Ontario
- C-2 Alberta Grid
- C-3 Alberta Non-Grid
- C-4 New Brunswick
- C-5 Nova Scotia



	Key Assumptions - Ontario RSP									
	Written	Average	Written	Earned	earned rate		Ultimate Loss			
	Exposures	Written Premium	Premium (\$000s)	Premium (\$000s)	change	claims trend	Ratio (nominal)			
Amounts		rieiiiluiii	(30005)	(30005)			(HOHIIIIai)			
2016	183,082	1,836	336,050	270,863	(1.7%)	2.8%	117.9%			
2017	203,979	1,847	376,652	374,862	(0.9%)	0.4%	119.9%			
2018	219,457	1,883	413,190	382,147	0.2%	3.3%	122.5%			
Change	%	%	%	%	pts	pts	pts			
2017	11.4%	0.6%	12.1%	38.4%	0.8	(2.4)	2.0			
2018	7.6%	1.9%	9.7%	1.9%	1.1	2.9	2.6			

### Selected Claims Development MfADs (Jun. 30, 2017)

Accident	Third Party	Accident	Other	Total
Year	Liability	Benefits	Coverages	
1994	10.0%	10.0%	10.0%	10.0%
1995	10.0%	10.0%	10.0%	10.0%
1996	10.0%	10.0%	10.0%	10.0%
1997	10.0%	10.0%	10.0%	10.0%
1998	10.0%	10.0%	10.0%	10.0%
1999	10.0%	10.0%	10.0%	10.0%
2000	10.0%	10.0%	10.0%	10.0%
2001	10.0%	10.0%	10.0%	10.0%
2002	10.0%	10.0%	10.0%	10.0%
2003	10.0%	10.0%	10.0%	10.0%
2004	10.0%	10.0%	10.0%	10.0%
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%	9.8%	10.0%
2012	10.0%	10.0%	9.2%	10.0%
2013	12.5%	12.5%	12.1%	12.5%
2014	15.0%	15.0%	14.3%	15.0%
2015	15.0%	15.0%	14.3%	15.0%
2016	17.4%	17.5%	12.6%	17.4%
2017	19.1%	20.0%	6.7%	19.1%
2018	14.5%	20.0%	5.2%	14.8%
prem liab	14.5%	20.0%	5.2%	14.8%

discount rate: 1.23% margin (basis points): 25



	Key Assumptions - Alberta Grid RSP									
	Written	Average	Written	Earned	earned rate		Ultimate Loss			
		Written	Premium	Premium		claims trend	Ratio			
	Exposures	Premium	(\$000s)	(\$000s)	change		(nominal)			
Amounts				_						
2016	63,360	2,343	148,471	131,818	3.6%	4.6%	95.9%			
2017	67,275	2,410	162,164	150,412	7.7%	4.6%	90.2%			
2018	76,403	2,482	189,665	184,393	2.4%	4.6%	89.9%			
Change	%	%	%	%	pts	pts	pts			
2017	6.2%	2.9%	9.2%	14.1%	4.1	-	(5.7)			
2018	13.6%	3.0%	17.0%	22.6%	(5.3)	0.0	(0.3)			

### Selected Claims Development MfADs (Jun. 30, 2017)

			- /	
Accident	Third Party	Accident	Other	Total
Year	Liability	Benefits	Coverages	
2004	10.0%	10.0%	10.0%	10.0%
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%	9.5%	10.0%
2011	10.0%	10.0%	10.0%	10.0%
2012	10.0%	10.0%	9.7%	10.0%
2013	10.0%	10.0%	10.0%	10.0%
2014	10.0%	10.0%	10.0%	10.0%
2015	12.4%	10.0%	12.5%	12.5%
2016	12.4%	10.0%	11.4%	12.4%
2017	12.1%	10.0%	7.1%	11.8%
2018	11.8%	10.0%	5.1%	10.0%
prem liab	11.8%	10.0%	5.1%	10.0%

discount rate: 1.19% margin (basis points): 25



	Key Assumptions - Alberta Non-Grid RSP									
	Written	Average	Written	Earned	earned rate		Ultimate Loss			
		Written	Premium	Premium	change	claims trend	Ratio			
	Exposures	Premium	(\$000s)	(\$000s)			(nominal)			
Amounts										
2016	67,752	1,471	99,669	90,473	2.6%	4.7%	118.9%			
2017	63,278	1,496	94,647	96,253	6.5%	4.7%	109.9%			
2018	67,932	1,491	101,307	97,354	2.2%	4.7%	110.4%			
Change	%	%	%	%	pts	pts	pts			
2017	(6.6%)	1.7%	(5.0%)	6.4%	3.9	-	(9.0)			
2018	7.4%	(0.3%)	7.0%	1.1%	(4.3)	(0.0)	0.5			

#### Selected Claims Development MfADs (Jun. 30, 2017)

Accident	Third Party	Accident	Other	Total
Year	Liability	Benefits	Coverages	
2004	10.0%	10.0%	10.0%	10.0%
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%	9.7%	10.0%
2011	10.0%	10.0%	10.0%	10.0%
2012	10.0%	10.0%	9.2%	10.0%
2013	10.0%	10.0%	9.8%	10.0%
2014	10.0%	10.0%	9.4%	10.0%
2015	12.5%	10.0%	12.4%	12.5%
2016	12.5%	10.0%	12.5%	12.5%
2017	12.1%	10.0%	6.2%	11.5%
2018	11.8%	10.0%	5.1%	8.9%
prem liab	11.8%	10.0%	5.1%	8.9%

discount rate: 1.20% margin (basis points): 25



		Key Ass	sumptions - Ne	w Brunswick I	RSP		
	Written	Average	Written	Earned	earned rate		Ultimate Loss
		Written	Premium	Premium		claims trend	Ratio
	Exposures	Premium	(\$000s)	(\$000s)	change		(nominal)
Amounts							
2016	8,502	1,146	9,742	9,977	2.3%	3.6%	66.1%
2017	10,868	1,225	13,318	10,781	3.7%	3.5%	72.4%
2018	13,689	1,277	17,486	15,974	1.7%	3.0%	72.1%
Change	%	%	%	%	pts	pts	pts
2017	27.8%	6.9%	36.7%	8.1%	1.4	(0.1)	6.3
2018	26.0%	4.2%	31.3%	48.2%	(2.0)	(0.5)	(0.3)

### Selected Claims Development MfADs (Jun. 30, 2017)

Accident	Third Party	Accident	Other	Total
Year	Liability	Benefits	Coverages	
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%	5.0%	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%	8.0%	10.0%
2015	12.5%	10.0%	10.8%	12.2%
2016	12.5%	10.0%	8.8%	12.0%
2017	12.3%	10.0%	5.9%	11.5%
2018	11.7%	10.0%	5.1%	9.3%
prem liab	11.7%	10.0%	5.1%	9.3%

discount rate: 1.17% margin (basis points): 25



		Key A	ssumptions - N	Nova Scotia RS	Р		
	Written	Average	Written	Earned	earned rate		Ultimate Loss
		Written	Premium	Premium		claims trend	Ratio
	Exposures	Premium	(\$000s)	(\$000s)	change		(nominal)
Amounts							
2016	12,555	1,209	15,183	14,799	3.3%	4.2%	83.2%
2017	19,685	1,442	28,378	18,850	3.3%	4.2%	92.1%
2018	26,009	1,522	39,593	35,242	2.8%	4.2%	92.4%
Change	%	%	%	%	pts	pts	pts
2017	56.8%	19.3%	86.9%	27.4%	-	-	8.9
2018	32.1%	5.5%	39.5%	87.0%	(0.5)	0.0	0.3

### Selected Claims Development MfADs (Jun. 30, 2017)

		_	017)	
Accident	Third Party	Accident	Other	Total
Year	Liability	Benefits	Coverages	10tai
	Margins	Margins	Margins	Margins
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	12.5%	10.0%	9.8%	12.4%
2015	12.5%	10.0%	12.5%	12.4%
2016	12.5%	10.0%	12.5%	12.3%
2017	12.4%	10.0%	6.4%	12.0%
2018	12.1%	10.0%	5.1%	10.6%
prem liab	12.1%	10.0%	5.1%	10.6%

discount rate: 1.17% margin (basis points): 25



# Exhibit B-1 Ontario RSP Summary of Operations

in \$ thousands	201801	201802	201803	201804	201805	201806	201807	201808	201809	201810	201811	201812
Underwriting Revenue												
written premium	29,379	28,364	33,988	31,769	39,152	39,465	36,255	38,789	37,358	35,232	33,745	29,694
lecrease / (increase) in unearned	3,125	2,219	(1,304)	(91)	(7,202)	(8,131)	(5,217)	(7,353)	(4,906)	(2,591)	(1,346)	1,754
earned premium	32,504	30,583	32,684	31,678	31,950	31,334	31,038	31,436	32,452	32,641	32,399	31,448
Claims Incurred												
Prior Accident Years												
Undiscounted	-	-	-	-	-	-	-	-	-	-	-	-
effect of discounting	(2,744)	(3,225)	(2,869)	(2,431)	(2,384)	(2,317)	(2,255)	(2,205)	(2,143)	(2,092)	(2,040)	(1,995
Discounted	(2,744)	(3,225)	(2,869)	(2,431)	(2,384)	(2,317)	(2,255)	(2,205)	(2,143)	(2,092)	(2,040)	(1,995
Current Accident Year												
Undiscounted	39,817	37,465	40,037	38,806	39,138	38,385	38,022	38,510	39,753	39,985	39,689	38,524
effect of discounting	5,424	4,975	5,174	4,822	4,668	4,326	4,042	3,752	3,548	3,179	2,648	1,978
Discounted	45,241	42,440	45,211	43,628	43,806	42,711	42,064	42,262	43,301	43,164	42,337	40,502
Claims Incurred	42,497	39,215	42,342	41,197	41,422	40,394	39,809	40,057	41,158	41,072	40,297	38,507
Underwriting Expenses												
Expense Allowance	8,785	8,480	10,162	9,499	11,706	11,800	10,840	11,598	11,170	10,534	10,089	8,878
% wp	29.9%	29.9%	29.9%	29.9%	29.9%	29.9%	29.9%	29.9%	29.9%	29.9%	29.9%	29.99
Premium Deficiency / (DPAC)												
Undiscounted	(685)	(369)	586	443	2,288	2,650	2,132	2,789	2,310	1,865	1,649	885
effect of discounting	(443)	(300)	220	62	1,100	1,251	850	1,176	835	518	349	(101
Discounted	(1,128)	(669)	806	505	3,388	3,901	2,982	3,965	3,145	2,383	1,998	784
Underwriting Expenses	7,657	7,811	10,968	10,004	15,094	15,701	13,822	15,563	14,315	12,917	12,087	9,662
Net Underwriting Gain (Loss)	(17,650)	(16,443)	(20,626)	(19,523)	(24,566)	(24,761)	(22,593)	(24,184)	(23,021)	(21,348)	(19,985)	(16,721
Administrative Expenses	141	136	163	153	188	189	174	186	179	169	162	143
Operating Result	(17,791)	(16,579)	(20,789)	(19,676)	(24,754)	(24,950)	(22,767)	(24,370)	(23,200)	(21,517)	(20,147)	(16,864
operating nestate	(17,731)	(10,575)	(20,703)	(15,070)	(24,754)	(24,550)	(LL,707)	(24,570)	(13,100)	(21,317)	(20,247)	(10,00-
Ratios												
Claims & Adj. Expenses to EP							4					
Prior Accident Year	(8.4%)	(10.5%)	(8.8%)	(7.7%)	(7.5%)	(7.4%)	(7.3%)	(7.0%)	(6.6%)	(6.4%)	(6.3%)	(6.3%
Current Accident Year	139.2%	138.8%	138.3%	137.7%	137.1%	136.3%	135.5%	134.4%	133.4%	132.2%	130.7%	128.8%
All Accident Years Combined	130.8%	128.3%	129.5%	130.0%	129.6%	128.9%	128.2%	127.4%	126.8%	125.8%	124.4%	122.5%
Underwriting & Admin Exp (EP)	24.0%	26.0%	34.1%	32.1%	47.8%	50.7%	45.1%	50.1%	44.7%	40.1%	37.8%	31.2%
Combined Operating Ratio	154.8%	154.3%	163.6%	162.1%	177.4%	179.6%	173.3%	177.5%	171.5%	165.9%	162.2%	153.7%



# Exhibit B-1 Ontario RSP Summary of Operations

In \$ thousands	538 9.7%
Discounted   Claims Incurred	538 9.7%
Underwriting Revenue   Written premium   Writt	538 9.7%
written premium   336,050   376,652   413,190   40,602   12.1%   36,     decrease / (increase) in unearned   (65,187)   (1,790)   (31,043)   63,397   (97.3%)   (29,     earned premium   270,863   374,862   382,147   103,999   38.4%   7,     Claims Incurred   Prior Accident Years   Undiscounted   (70,535)   (49,683)   -   20,852   (29,6%)   49,     effect of discounting   (36,400)   (58,357)   (28,700)   (21,957)   60.3%   29,     Discounted   (106,935)   (108,040)   (28,700)   (1,105)   1.0%   79,     Current Accident Year   Undiscounted   323,542   450,832   468,131   127,290   39.3%   17,     effect of discounting   38,551   46,744   48,536   8,193   21.3%   1,     Discounted   255,158   389,536   487,967   135,483   37.4%   19,     Claims Incurred   255,158   389,536   487,967   134,378   52.7%   98,     Premium Deficiency / (DPAC)   Undiscounted   7,830   9,630   16,543   1,800   23.0%   6,666   1,800   1,800   1,800   23.0%   6,667   1,800	
Claims Incurred   (65,187) (1,790) (31,043)   (63,397 (97.3%)   (29,686)	
Claims Incurred   Prior Accident Year   Undiscounted effect of discounting   Undiscounted effect of discounting   Undiscounted effect of discounting   Undiscounted   Undiscounted effect of discounting   Undiscounted   Undiscounted   Undiscounted   Undiscounted   Undiscounted   Undiscounted effect of discounting   Undiscounted   Undiscounted   Undiscounted effect of discounting   Undiscounted	253) 1.634.2%
Claims Incurred Prior Accident Years  Undiscounted effect of discounting	
Prior Accident Years         Undiscounted effect of discounting Discounted         (70,535)         (49,683)         - 20,852         (29,6%)         49,63         29,65         29,75         20,852         (29,67)         20,852         (29,6%)         49,62         29,75         20,852         (29,700)         29,73         21,700         20,852         (29,6%)         29,33         29,33         29,75         20,852         (29,6%)         29,33         29,33         20,33         20,33         20,33         20,33         20,33         20,33         20,33         20,33         20,33         20,33         20,34         20,33         20,34 <td>285 1.9%</td>	285 1.9%
Undiscounted effect of discounting Discounted (70,535) (49,683) - (20,852 (29.6%) (36,400) (58,357) (28,700) (21,957) 60.3% 29,10 (106,935) (108,040) (28,700) (1,105) 1.0% 79,10 (1,105) 1.0% 79,10 (1,105) 1.0% 79,10 (1,105) 1.0% 79,10 (1,105) 1.0% 79,10 (1,105) 1.0% 79,10 (1,105) 1.0% 79,10 (1,105) 1.0% 79,10 (1,105) 1.0% 79,10 (1,105) 1.0% 79,10 (1,105) 1.0% 79,10 (1,105) 1.0% 79,10 (1,105) 1.0% 1.0% 1.0% 1.0% 1.0% 1.0% 1.0% 1.0%	
effect of discounting	
Discounted   (106,935)   (108,040)   (28,700)   (1,105)   1.0%   79,000	
Current Accident Year Undiscounted effect of discounting 38,551 46,744 48,536 8,193 21.3% 1, Discounted 352,093 497,576 516,667 135,483 37.4% 19,  Claims Incurred 255,158 389,536 487,967 134,378 52.7% 98,  Underwriting Expenses  Expense Allowance \$\frac{\pmathrm{9}}{\pmathrm{9}} \text{29.7}\pmathrm{9}} 29.7\pmathrm{30.2}\pmathrm{29.9}\pmathrm{9}} 30.2\pmathrm{29.9}\pmathrm{9}} 0.5\pmathrm{9}  Premium Deficiency / (DPAC) Undiscounted 7,830 9,630 16,543 1,800 23.0\pmathrm{9}	. ,
Undiscounted effect of discounting	340 (73.4%)
effect of discounting Discounted         38,551         46,744         48,536         8,193         21.3%         1,           Claims Incurred         362,093         497,576         516,667         135,483         37.4%         19,1           Underwriting Expenses         Expense Allowance %wp         99,734         113,593         123,541         13,859         13.9%         9,6           Premium Deficiency / (DPAC) Undiscounted         7,830         9,630         16,543         1,800         23.0%         6,6	
Discounted   362,093   497,576   516,667   135,483   37.4%   19,1	299 3.8%
Claims Incurred   255,158   389,536   487,967   134,378   52.7%   98,7	792 3.8%
Underwriting Expenses  Expense Allowance 99,734 113,593 123,541 13,859 13.9% 9,4	091 3.8%
Expense Allowance 99,734 113,593 123,541 13,859 13.9% 9,600 10,5% (0.5%)  Premium Deficiency / (DPAC) Undiscounted 7,830 9,630 16,543 1,800 23.0% 6,600 6,60	431 25.3%
Expense Allowance 99,734 113,593 123,541 13,859 13.9% 9,600 10,5% (0.5%)  Premium Deficiency / (DPAC) Undiscounted 7,830 9,630 16,543 1,800 23.0% 6,600 6,60	
% wp         29.7%         30.2%         29.9%         0.5%         (c)           Premium Deficiency / (DPAC)         Undiscounted         7,830         9,630         16,543         1,800         23.0%         6,6	948 8.8%
Premium Deficiency / (DPAC) Undiscounted 7,830 9,630 16,543 1,800 23.0% 6,6	0.3%)
Undiscounted 7,830 9,630 16,543 1,800 23.0% 6,	
, , , , , , , , , , , , , , , , , , , ,	913 71.8%
	820 (267.0%)
	733 248.7%
	681 21.4%
Net Underwriting Gain (Loss) (103,168) (134,594) (251,421) (31,426) 30.5% (116,	827) 86.8%
(23,23)	
Administrative Expenses 1,308 1,528 1,983 220 16.8%	455 29.8%
Operating Result (104,476) (136,122) (253,404) (31,646) 30.3% (117,	282) 86.2%
Ratios	
Claims & Adj. Expenses to EP	20/
	.3% .5%
	.5% .8%
Underwriting & Admin Exp (EP) 44.4% 32.4% 38.6% (12.0%) 6.	.2%
Combined Operating Ratio 138.6% 136.3% 166.3% (2.3%) 30.	



# Exhibit B-2 Alberta Grid RSP Summary of Operations

in \$ thousands	201801	201802	201803	201804	201805	201806	201807	201808	201809	201810	201811	201812
Underwriting Revenue												
written premium	10,199	10,643	13,767	16,867	18,122	18,334	17,212	19,988	19,462	18,077	14,787	12,207
lecrease / (increase) in unearned	4,099	2,915	875	(2,073)	(2,824)	(2,959)	(1,604)	(4,026)	(3,020)	(1,246)	1,480	3,111
earned premium	14,298	13,558	14,642	14,794	15,298	15,375	15,608	15,962	16,442	16,831	16,267	15,318
Claims Incurred												
Prior Accident Years												
Undiscounted	-	-	-	=	-	=	=	-	-	-	=	-
effect of discounting	(394)	(754)	(729)	(665)	(622)	(623)	(604)	(546)	(515)	(483)	(589)	(623
Discounted	(394)	(754)	(729)	(665)	(622)	(623)	(604)	(546)	(515)	(483)	(589)	(623
Current Accident Year												
Undiscounted	12,853	12,189	13,164	13,300	13,753	13,822	14,032	14,350	14,781	15,131	14,624	13,771
effect of discounting	1,017	941	987	957	941	879	819	735	639	503	278	2
Discounted	13,870	13,130	14,151	14,257	14,694	14,701	14,851	15,085	15,420	15,634	14,902	13,773
Claims Incurred	13,476	12,376	13,422	13,592	14,072	14,078	14,247	14,539	14,905	15,151	14,313	13,150
Underwriting Expenses												
Expense Allowance	3,029	3,161	4,089	5,009	5,382	5,446	5,112	5,937	5,781	5,369	4,392	3,625
% wp	29.7%	29.7%	29.7%	29.7%	29.7%	29.7%	29.7%	29.7%	29.7%	29.7%	29.7%	29.75
Premium Deficiency / (DPAC)												
Undiscounted	431	304	134	(115)	(156)	(140)	13	(153)	(33)	160	408	543
effect of discounting	(269)	(190)	(53)	142	196	203	117	281	216	104	(77)	(188
Discounted	162	114	81	27	40	63	130	128	183	264	331	355
Underwriting Expenses	3,191	3,275	4,170	5,036	5,422	5,509	5,242	6,065	5,964	5,633	4,723	3,980
Net Underwriting Gain (Loss)	(2,369)	(2,093)	(2,950)	(3,834)	(4,196)	(4,212)	(3,881)	(4,642)	(4,427)	(3,953)	(2,769)	(1,812
Administrative Expenses	65	68	88	108	116	117	111	128	124	115	94	79
Operating Result	(2,434)	(2,161)	(3,038)	(3,942)	(4,312)	(4,329)	(3,992)	(4,770)	(4,551)	(4,068)	(2,863)	(1,891
Ratios												
Claims & Adj. Expenses to EP												
Prior Accident Year	(2.00/)	(5.6%)	(F 00/)	(4.50/)	(4.10/)	(4.10/)	(3.9%)	(2.40/)	(2.40/)	(2.00/)	(2.0%)	/4 10/
Current Accident Year	(2.8%) 97.0%	(5.6%) 96.8%	(5.0%) 96.6%	(4.5%) 96.4%	(4.1%) 96.1%	(4.1%) 95.6%	(3.9%) 95.1%	(3.4%) 94.5%	(3.1%) 93.8%	(2.9%) 92.9%	(3.6%) 91.6%	(4.1% 89.9%
All Accident Years Combined	94.2%	91.2%	96.6%	91.9%	96.1%	95.6%	95.1%	94.5% 91.1%	93.8%	92.9%	91.6% 88.0%	89.9% 85.8%
	22.8%	24.7%	29.1%	34.8%	36.2%	36.6%	34.3%	38.8%	90.7% 37.0%		29.6%	26.5%
Underwriting & Admin Exp (EP)	22.8%	24.7%	29.1%	34.8%	30.2%	30.0%	34.3%	38.8%	37.0%	34.2%	29.0%	20.5%
Combined Operating Ratio	117.0%	115.9%	120.7%	126.7%	128.2%	128.1%	125.5%	129.9%	127.7%	124.2%	117.6%	112.3%



# Exhibit B-2 Alberta Grid RSP Summary of Operations

Alberta Grid 200				FULL YEAR			
AB Grid				Change durir	ng 2017	Change durin	g 2018
in \$ thousands	2016	2017	2018	Amount	%	Amount	%
Underwriting Revenue							
written premium	148,471	162,164	189,665	13,693	9.2%	27,501	17.0%
decrease / (increase) in unearned	(16,653)	(11,752)	(5,272)	4,901	(29.4%)	6,480	(55.1%)
earned premium	131,818	150,412	184,393	18,594	14.1%	33,981	22.6%
Claims Incurred							
Prior Accident Years							
Undiscounted	41,140	19,685	-	(21,455)	(52.2%)	(19,685)	(100.0%)
effect of discounting	(1,682)	(11,022)	(7,147)	(9,340)	555.3%	3,875	(35.2%)
Discounted	39,458	8,663	(7,147)	(30,795)	(78.0%)	(15,810)	(182.5%)
Current Accident Year							
Undiscounted	110,556	136,957	165,770	26,401	23.9%	28,813	21.0%
effect of discounting	7,515	7,418	8,698	(97)	(1.3%)	1,280	17.3%
Discounted	118,071	144,375	174,468	26,304	22.3%	30,093	20.8%
Claims Incurred	157,529	153,038	167,321	(4,491)	(2.9%)	14,283	9.3%
Underwriting Expenses							
Expense Allowance	44,733	46,817	56.332	2,084	4.7%	9,515	20.3%
% wp	30.1%	28.9%	29.7%	(1.2%)	4.770	0.8%	20.570
Premium Deficiency / (DPAC)							
Undiscounted	689	8,564	1,396	7,875	1,143.0%	(7,168)	(83.7%)
effect of discounting	1,915	301	482	(1,614)	(84.3%)	181	60.1%
Discounted	2,604	8,865	1,878	6,261	240.4%	(6,987)	(78.8%)
Underwriting Expenses	47,337	55,682	58,210	8,345	17.6%	2,528	4.5%
Net Underwriting Gain (Loss)	(73,048)	(58,308)	(41,138)	14.740	(20.2%)	17,170	(29.4%)
	( ),	,	( , ,	,	( ,	,	, ,
Administrative Expenses	894	980	1,213	85	9.6%	233	23.8%
Operating Result	(73,942)	(59,288)	(42,351)	14,655	(19.8%)	16,937	(28.6%)
Ratios							
Claims & Adj. Expenses to EP  Prior Accident Year	29.9%	5.8%	(2.00/)	(24.40/)		(0.70/)	
Current Accident Year	29.9% 89.6%	5.8% 96.0%	(3.9%) 94.6%	(24.1%) 6.4%		(9.7%) (1.4%)	
All Accident Years Combined	89.6% 119.5%	96.0%	94.6%	(17.7%)		(1.4%)	
	36.6%	37.7%	32.2%	` '		` '	
Underwriting & Admin Exp (EP)	30.0%	3/./70	34.470	1.1%		(5.5%)	
Combined Operating Ratio	156.1%	139.5%	122.9%	(16.6%)		(16.6%)	



# Exhibit B-3 Alberta Non-Grid RSP Summary of Operations

in \$ thousands	201801	201802	201803	201804	201805	201806	201807	201808	201809	201810	201811	201812
Underwriting Revenue												
written premium	7,256	7,042	8,619	9,410	9,614	9,097	8,890	8,658	9,075	9,152	7,757	6,737
lecrease / (increase) in unearned	849	518	(554)	(1,433)	(1,545)	(1,090)	(825)	(550)	(729)	(583)	630	1,359
earned premium	8,105	7,560	8,065	7,977	8,069	8,007	8,065	8,108	8,346	8,569	8,387	8,096
Claims Incurred Prior Accident Years												
Undiscounted	-	_	-	-	-	-	-	-	-	-	-	-
effect of discounting	(463)	(567)	(486)	(413)	(364)	(354)	(310)	(297)	(267)	(283)	(215)	(373
Discounted	(463)	(567)	(486)	(413)	(364)	(354)	(310)	(297)	(267)	(283)	(215)	(373
Current Accident Year												
Undiscounted	8,948	8,347	8,903	8,807	8,907	8,840	8,903	8,951	9,214	9,461	9,259	8,938
effect of discounting	694	630	645	607	572	516	454	370	274	149	(38)	(281
Discounted	9,642	8,977	9,548	9,414	9,479	9,356	9,357	9,321	9,488	9,610	9,221	8,657
Claims Incurred	9,179	8,410	9,062	9,001	9,115	9,002	9,047	9,024	9,221	9,327	9,006	8,284
Underwriting Expenses												
Expense Allowance	2,155	2,092	2,560	2,795	2,855	2,702	2,640	2,572	2,695	2,718	2,304	2,001
% wp	29.7%	29.7%	29.7%	29.7%	29.7%	29.7%	29.7%	29.7%	29.7%	29.7%	29.7%	29.7%
Premium Deficiency / (DPAC)												
Undiscounted	(84)	(37)	105	232	268	237	229	221	269	279	138	46
effect of discounting	(62)	(40)	45	112	123	91	70	53	67	60	(35)	(87
Discounted	(146)	(77)	150	344	391	328	299	274	336	339	103	(41
Underwriting Expenses	2,009	2,015	2,710	3,139	3,246	3,030	2,939	2,846	3,031	3,057	2,407	1,960
Net Underwriting Gain (Loss)	(3,083)	(2,865)	(3,707)	(4,163)	(4,292)	(4,025)	(3,921)	(3,762)	(3,906)	(3,815)	(3,026)	(2,148
Administrative Expenses	70	67	82	90	92	88	85	83	88	88	75	65
Operating Result	(3,153)	(2,932)	(3,789)	(4,253)	(4,384)	(4,113)	(4,006)	(3,845)	(3,994)	(3,903)	(3,101)	(2,213
Operating Result	(3,133)	(2,332)	(3,763)	(4,233)	(4,304)	(4,113)	(4,000)	(3,043)	(3,334)	(3,303)	(3,101)	(2,213
Ratios Claims & Adj. Expenses to EP												
Prior Accident Year	(5.7%)	(7.5%)	(6.0%)	(5.2%)	(4.5%)	(4.4%)	(3.8%)	(3.7%)	(3.2%)	(3.3%)	(2.6%)	(4.6%
Current Accident Year	(5.7%)	(7.5%) 118.7%	118.4%	(5.2%)	(4.5%) 117.5%	(4.4%) 116.8%	(3.8%)	(3.7%)	(3.2%)	(3.3%)	109.9%	106.9%
All Accident Years Combined	113.3%	111.2%	112.4%	112.8%	113.0%	110.8%	112.2%	111.3%	110.5%	108.8%	109.9%	100.9%
Underwriting & Admin Exp (EP)	25.7%	27.5%	34.6%	40.5%	41.4%	38.9%	37.5%	36.1%	37.4%	36.7%	29.6%	25.0%
					7*							
Combined Operating Ratio	139.0%	138.7%	147.0%	153.3%	154.4%	151.3%	149.7%	147.4%	147.9%	145.5%	136.9%	127.3%



# Exhibit B-3 Alberta Non-Grid RSP Summary of Operations

Alberta non-Gric 250				FULL YEAR			
AB non-Grid				Change durir	ng 2017	Change durin	g 2018
in \$ thousands	2016	2017	2018	Amount	%	Amount	%
Underwriting Revenue							
written premium	99,669	94,647	101,307	(5,022)	(5.0%)	6,660	7.0%
lecrease / (increase) in unearned	(9,196)	1,606	(3,953)	10,802	(117.5%)	(5,559)	(346.1%)
earned premium	90,473	96,253	97,354	5,780	6.4%	1,101	1.1%
Claims Incurred							
Prior Accident Years							
Undiscounted	2,286	4,790	-	2,504	109.5%	(4,790)	(100.0%)
effect of discounting	(3,163)	(7,471)	(4,392)	(4,308)	136.2%	3,079	(41.2%)
Discounted	(877)	(2,681)	(4,392)	(1,804)	205.7%	(1,711)	63.8%
Current Accident Year							
Undiscounted	102,363	106,364	107,478	4,001	3.9%	1,114	1.0%
effect of discounting	5,476	4,721	4,592	(755)	(13.8%)	(129)	(2.7%)
Discounted	107,839	111,085	112,070	3,246	3.0%	985	0.9%
Claims Incurred	106,962	108,404	107,678	1,442	1.3%	(726)	(0.7%)
Underwriting Expenses							
Expense Allowance	30,016	27,341	30.089	(2,675)	(8.9%)	2,748	10.1%
% wp	30.1%	28.9%	29.7%	(1.2%)	(0.0.1)	0.8%	
Premium Deficiency / (DPAC)							
Undiscounted	1,003	5,644	1,903	4,641	462.7%	(3,741)	(66.3%)
effect of discounting	987	(484)	397	(1,471)	(149.0%)	881	(182.0%)
Discounted	1,990	5,160	2,300	3,170	159.3%	(2,860)	(55.4%)
Underwriting Expenses	32,006	32,501	32,389	495	1.5%	(112)	(0.3%)
Net Underwriting Gain (Loss)	(48,495)	(44,652)	(42,713)	3,843	(7.9%)	1,939	(4.3%)
Administrative Expenses	899	917	973	18	2.0%	56	6.1%
Operating Result	(49,394)	(45,569)	(43,686)	3,825	(7.7%)	1,883	(4.1%)
Ratios							
Claims & Adj. Expenses to EP  Prior Accident Year	(1.00/)	(2.00/)	(4 50/)	(1.00/)		(1.70/)	
Current Accident Year	(1.0%) 119.2%	(2.8%) 115.4%	(4.5%) 115.1%	(1.8%)		(1.7%) (0.3%)	
All Accident Years Combined	119.2%	115.4%	110.6%			, ,	
				(5.6%)		(2.0%)	
Underwriting & Admin Exp (EP)	36.4%	34.7%	34.3%	(1.7%)		(0.4%)	
Combined Operating Ratio	154.6%	147.3%	144.9%	(7.3%)		(2.4%)	



# Exhibit B-4 New Brunswick RSP Summary of Operations

in \$ thousands	201801	201802	201803	201804	201805	201806	201807	201808	201809	201810	201811	201812
Underwriting Revenue												
written premium	955	903	1,069	1,439	1,683	1,697	1,708	2,323	1,581	1,799	1,235	1,09
lecrease / (increase) in unearned	185	195	118	(224)	(403)	(384)	(356)	(886)	(75)	(256)	245	32
earned premium	1,140	1,098	1,187	1,215	1,280	1,313	1,352	1,437	1,506	1,543	1,480	1,42
Claims Incurred												
Prior Accident Years												
Undiscounted	-	=	-	=	-	-	-	-	-	-	-	-
effect of discounting	12	(27)	(29)	(21)	(36)	(27)	(28)	(21)	(31)	(17)	(20)	(2
Discounted	12	(27)	(29)	(21)	(36)	(27)	(28)	(21)	(31)	(17)	(20)	(2
Current Accident Year												
Undiscounted	822	792	856	876	923	946	975	1,036	1,086	1,112	1,067	1,02
effect of discounting	58	52	55	54	53	50	46	41	38	28	14	(
Discounted	880	844	911	930	976	996	1,021	1,077	1,124	1,140	1,081	1,02
Claims Incurred	892	817	882	909	940	969	993	1,056	1,093	1,123	1,061	1,00
Underwriting Expenses												
Expense Allowance	274	259	305	412	482	485	488	664	452	514	353	31
% wp	28.7%	28.7%	28.5%	28.6%	28.6%	28.6%	28.6%	28.6%	28.6%	28.6%	28.6%	28.6
Premium Deficiency / (DPAC)												
Undiscounted	46	51	31	(52)	(95)	(90)	(82)	(208)	(8)	(49)	75	9.
effect of discounting	(8)	(9)	(6)	10	21	20	18	47	3	15	(13)	(1
Discounted	38	42	25	(42)	(74)	(70)	(64)	(161)	(5)	(34)	62	7
Underwriting Expenses	312	301	330	370	408	415	424	503	447	480	415	39
Net Underwriting Gain (Loss)	(64)	(20)	(25)	(64)	(68)	(71)	(65)	(122)	(34)	(60)	4	2
A desiminate estiva European	49	46	55	73	86	86	87	118	80	92	63	5
Administrative Expenses	49	40	55	/3	80	80	8/	118	80	92	03	5
Operating Result	(113)	(66)	(80)	(137)	(154)	(157)	(152)	(240)	(114)	(152)	(59)	(2
Ratios												
Claims & Adj. Expenses to EP												
Prior Accident Year	1.1%	(2.5%)	(2.4%)	(1.7%)	(2.8%)	(2.1%)	(2.1%)	(1.5%)	(2.1%)	(1.1%)	(1.4%)	(1.49
Current Accident Year	77.2%	76.9%	76.7%	76.5%	76.3%	75.9%	75.5%	74.9%	74.6%	73.9%	73.0%	72.09
All Accident Years Combined	78.3%	74.4%	74.3%	74.8%	73.5%	73.8%	73.4%	73.4%	72.5%	72.8%	71.6%	70.69
Underwriting & Admin Exp (EP)	31.7%	31.6%	32.4%	36.5%	38.6%	38.2%	37.8%	43.2%	35.0%	37.1%	32.3%	31.5%
Combined Operating Ratio	110.0%	106.0%	106.7%	111.3%	112.1%	112.0%	111.2%	116.6%	107.5%	109.9%	103.9%	102.19



# Exhibit B-4 New Brunswick RSP Summary of Operations

New Brunswick 300				FULL YEAR			
NB							
				Change duri	ng 2017	Change durir	ng 2018
in \$ thousands	2016	2017	2018	Amount	%	Amount	%
Underwriting Revenue							
written premium	9,742	13,318	17,486	3,576	36.7%	4,168	31.3%
lecrease / (increase) in unearned	235	(2,537)	(1,512)	(2,772)	(1,179.6%)	1,025	(40.4%)
earned premium	9,977	10,781	15,974	804	8.1%	5,193	48.2%
Claims Incurred							
Prior Accident Years							
Undiscounted	(2,182)	(1,618)	-	564	(25.8%)	1,618	(100.0%)
effect of discounting	(819)	(786)	(265)	33	(4.0%)	521	(66.3%)
Discounted	(3,001)	(2,404)	(265)	597	(19.9%)	2,139	(89.0%)
Current Accident Year							
Undiscounted	7,540	7,936	11,517	396	5.3%	3,581	45.1%
effect of discounting	449	316	487	(133)	(29.6%)	171	54.1%
Discounted	7,989	8,252	12,004	263	3.3%	3,752	45.5%
Claims Incurred	4,988	5,848	11,739	860	17.2%	5,891	100.7%
Underwriting Expenses							
Expense Allowance	3,431	4,239	5,001	808	23.5%	762	18.0%
% wp	35.2%	31.8%	28.6%	(3.4%)	23.370	(3.2%)	10.070
Premium Deficiency / (DPAC)							
Undiscounted	(157)	(903)	(286)	(746)	475.2%	617	(68.3%)
effect of discounting	(62)	25	82	87	(140.3%)	57	228.0%
Discounted	(219)	(878)	(204)	(659)	300.9%	674	(76.8%)
Underwriting Expenses	3,212	3,361	4,797	149	4.6%	1,436	42.7%
Net Underwriting Gain (Loss)	1,777	1,572	(562)	(205)	(11.5%)	(2,134)	(135.8%)
				. ,	`		
Administrative Expenses	476	686	891	211	44.3%	205	29.8%
Operating Result	1,301	886	(1,453)	(416)	(31.9%)	(2,339)	(264.1%)
Ratios							
Claims & Adj. Expenses to EP			1		1		
Prior Accident Year	(30.1%)	(22.3%)	(1.7%)	7.8%	1	20.6%	
Current Accident Year	80.1%	76.5%	75.1%	(3.6%)	1	(1.4%)	
All Accident Years Combined	50.0%	54.2%	73.4%	4.2%	1	19.2%	
Underwriting & Admin Exp (EP)	37.0%	37.5%	35.6%	0.5%		(1.9%)	
Combined Operating Patio	87.0%	91.7%	109.0%	4.7%		17.3%	
Combined Operating Ratio	87.0%	91.7%	109.0%	4.1%		17.3%	



### Exhibit B-5 Nova Scotia RSP Summary of Operations

in \$ thousands	201801	201802	201803	201804	201805	201806	201807	201808	201809	201810	201811	201812
Underwriting Revenue												
written premium	2,211	2,004	2,797	3,238	3,927	4,525	4,086	4,102	4,467	3,733	2,481	2,022
lecrease / (increase) in unearned	245	410	(154)	(512)	(1,039)	(1,503)	(980)	(898)	(1,069)	(418)	642	925
earned premium	2,456	2,414	2,643	2,726	2,888	3,022	3,106	3,204	3,398	3,315	3,123	2,947
Claims Incurred												
Prior Accident Years												
Undiscounted	-	-	-	-	-	-	-	-	-	-	-	-
effect of discounting	36	(59)	(30)	(48)	(49)	(48)	(51)	(68)	(57)	(79)	(75)	(52
Discounted	36	(59)	(30)	(48)	(49)	(48)	(51)	(68)	(57)	(79)	(75)	(52
Current Accident Year												
Undiscounted	2,269	2,230	2,442	2,519	2,668	2,793	2,870	2,961	3,139	3,063	2,886	2,723
effect of discounting	162	155	168	167	173	176	174	175	176	166	143	126
Discounted	2,431	2,385	2,610	2,686	2,841	2,969	3,044	3,136	3,315	3,229	3,029	2,849
Claims Incurred	2,467	2,326	2,580	2,638	2,792	2,921	2,993	3,068	3,258	3,150	2,954	2,797
Underwriting Expenses												
Expense Allowance	668	605	845	978	1,186	1,367	1,234	1,239	1,349	1,128	750	611
% wp	30.2%	30.2%	30.2%	30.2%	30.2%	30.2%	30.2%	30.2%	30.2%	30.2%	30.2%	30.29
Premium Deficiency / (DPAC)												
Undiscounted	15	28	4	(7)	(26)	(35)	(1)	11	19	53	93	104
effect of discounting	(10)	(36)	13	38	76	112	75	69	83	36	(41)	(63
Discounted	5	(8)	17	31	50	77	74	80	102	89	52	41
Underwriting Expenses	673	597	862	1,009	1,236	1,444	1,308	1,319	1,451	1,217	802	652
Net Underwriting Gain (Loss)	(684)	(509)	(799)	(921)	(1,140)	(1,343)	(1,195)	(1,183)	(1,311)	(1,052)	(633)	(502
A desirable for Europe	78	70	98	44.4	137	450	142	142	456	130	00	71
Administrative Expenses	/8	70	98	114	137	158	143	143	156	130	86	/1
Operating Result	(762)	(579)	(897)	(1,035)	(1,277)	(1,501)	(1,338)	(1,326)	(1,467)	(1,182)	(719)	(573
Ratios												
Claims & Adj. Expenses to EP												
Prior Accident Year	1.5%	(2.4%)	(1.1%)	(1.8%)	(1.7%)	(1.6%)	(1.6%)	(2.1%)	(1.7%)	(2.4%)	(2.4%)	(1.8%
Current Accident Year	99.0%	98.8%	98.8%	98.5%	98.4%	98.2%	98.0%	97.9%	97.6%	97.4%	97.0%	96.7%
All Accident Years Combined	100.5%	96.4%	97.7%	96.7%	96.7%	96.6%	96.4%	95.8%	95.9%	95.0%	94.6%	94.9%
Underwriting & Admin Exp (EP)	30.6%	27.6%	36.3%	41.2%	47.5%	53.0%	46.7%	45.6%	47.3%	40.6%	28.4%	24.5%
Combined Operating Ratio	131.1%	124.0%	134.0%	137.9%	144.2%	149.6%	143.1%	141.4%	143.2%	135.6%	123.0%	119.4%



### Exhibit B-5 Nova Scotia RSP Summary of Operations

Nova Scotia 400	FULL YEAR										
NS											
				Change duri	ng 2017	Change durir	ng 2018				
in \$ thousands	2016	2017	2018	Amount	%	Amount	%				
Underwriting Revenue											
written premium	15,183	28,378	39,593	13,195	86.9%	11,215	39.5%				
decrease / (increase) in unearned	(384)	(9,528)	(4,351)	(9,144)	2,381.3%	5,177	(54.3%)				
earned premium	14,799	18,850	35,242	4,051	27.4%	16,392	87.0%				
Claims Incurred											
Prior Accident Years											
Undiscounted	440	(3,616)	-	(4,056)	(921.8%)	3,616	(100.0%)				
effect of discounting	(1,075)	(1,586)	(580)	(511)	47.5%	1,006	(63.4%)				
Discounted	(635)	(5,202)	(580)	(4,567)	719.2%	4,622	(88.9%)				
Current Accident Year											
Undiscounted	14,224	17,513	32,563	3,289	23.1%	15,050	85.9%				
effect of discounting	1,155	1,017	1,961	(138)	(11.9%)	944	92.8%				
Discounted	15,379	18,530	34,524	3,151	20.5%	15,994	86.3%				
Claims Incurred	14,744	13,328	33,944	(1,416)	(9.6%)	20,616	154.7%				
Underwriting Expenses											
Expense Allowance	5.288	8,783	11.960	3,495	66.1%	3.177	36.2%				
% wp	34.8%	31.0%	30.2%	(3.8%)		(0.8%)					
Premium Deficiency / (DPAC)											
Undiscounted	(184)	(963)	258	(779)	423.4%	1,221	(126.8%)				
effect of discounting	(22)	491	352	513	(2,331.8%)	(139)	(28.3%)				
Discounted	(206)	(472)	610	(266)	129.1%	1,082	(229.2%)				
Underwriting Expenses	5,082	8,311	12,570	3,229	63.5%	4,259	51.2%				
Net Underwriting Gain (Loss)	(5,027)	(2,789)	(11,272)	2,238	(44.5%)	(8,483)	304.2%				
Administrative Expenses	474	865	1,384	391	82.5%	519	60.0%				
Operating Result	(5,501)	(3,654)	(12,656)	1,847	(33.6%)	(9,002)	246.4%				
Ratios											
Claims & Adj. Expenses to EP				ĺ		ĺ					
Prior Accident Year	(4.3%)	(27.6%)	(1.6%)	(23.3%)		26.0%					
Current Accident Year	103.9%	98.3%	98.0%	(5.6%)		(0.3%)					
All Accident Years Combined	99.6%	70.7%	96.4%	(28.9%)		25.7%					
Underwriting & Admin Exp (EP)	37.5%	48.7%	39.6%	11.2%		(9.1%)					
Combined Operating Ratio	137.1%	119.4%	136.0%	(17.7%)		16.6%					
Combined Operating Natio	137.1/0	113.4/0	130.078	(17.770)		10.0/6					



# Exhibit C-1 Ontario RSP Projected Policy Liabilities

Ontario	Projected Balances as at Dec. 31, 2017 (\$000s)										
ending 2017	r	nominal value	s	actuari	al present val	ue adjustments	(apvs)				
Acc Yr	Case	IBNR	Total Unpaid	discount	investment PfAD	development PfAD	Total apvs	TOTAL			
prior	17,423	252	17,675	(274)	54	1,741	1,521	19,196			
1998	610	23	633	(19)	4	61	46	679			
1999	778	(8)	770	(28)	5	74	51	821			
2000	11	62	73	(3)	1	7	5	78			
2001	801	133	934	(46)	8	88	50	984			
2002	392	228	620	(34)	7	59	32	652			
2003	833	308	1,141	(67)	13	107	53	1,194			
2004	1,131	420	1,551	(101)	20	145	64	1,615			
2005	162	469	631	(45)	9	59	23	654			
2006	2,617	941	3,558	(278)	53	328	103	3,661			
2007	2,249	1,462	3,711	(293)	56	342	105	3,816			
2008	4,535	2,790	7,325	(476)	95	684	303	7,628			
2009	10,359	5,728	16,087	(853)	161	1,524	832	16,919			
2010	14,558	8,282	22,840	(1,119)	206	2,172	1,259	24,099			
2011	21,052	2,253	23,305	(1,119)	233	2,219	1,333	24,638			
2012	37,174	3,747	40,921	(1,596)	327	3,932	2,663	43,584			
2013	59,978	5,305	65,283	(2,089)	392	7,899	6,202	71,485			
2014	82,187	11,682	93,869	(2,910)	563	13,644	11,297	105,166			
2015	97,237	34,701	131,938	(4,354)	792	19,138	15,576	147,514			
2016	91,483	63,177	154,660	(5,722)	1,083	25,915	21,276	175,936			
PAYs (sub-total):	445,570	141,955	587,525	(21,426)	4,082	80,138	62,794	650,319			
CAY (2017)	132,996	175,824	308,820	(12,353)	2,471	56,626	46,744	355,564			
claims liabilities:	578,566	317,779	896,345	(33,779)	6,553	136,764	109,538	1,005,883			
	Unearned Premium	Premium Defiency / (DPAC)	Total Provision	discount	investment PfAD	development PfAD	Total apvs	TOTAL*			
premium liabilities:	187,919	42,651	230,570	(7,594)	1,381	32,934	26,721	257,291			
				*Tot	al may not be s	um of parts, as ap	vs apply to future	costs within UPR			
policy liabilities:			1,126,915	(41,373)	7,934	169,698	136,259	1,263,174			



# Exhibit C-1 Ontario RSP Projected Policy Liabilities

Ontario	Projected Balances as at Dec. 31, 2018 (\$000s)										
ending 2018	r	nominal values	5	actuari	al present val	ue adjustments	(apvs)				
Acc Yr	Case	IBNR	Total Unpaid	discount	investment PfAD	development PfAD	Total apvs	TOTAL			
prior	14,135	225	14,360	(118)	25	1,427	1,334	15,694			
1999	613	(8)	605	(18)	4	58	44	649			
2000	11	50	61	(2)	-	6	4	65			
2001	626	106	732	(31)	7	70	46	778			
2002	308	179	487	(24)	4	47	27	514			
2003	654	242	896	(48)	10	85	47	943			
2004	888	330	1,218	(72)	13	115	56	1,274			
2005	127	368	495	(32)	6	47	21	516			
2006	2,053	739	2,792	(198)	39	259	100	2,892			
2007	1,765	1,148	2,913	(227)	44	268	85	2,998			
2008	3,559	2,189	5,748	(454)	86	530	162	5,910			
2009	8,129	4,494	12,623	(820)	164	1,180	524	13,147			
2010	11,423	6,498	17,921	(950)	179	1,697	926	18,847			
2011	16,518	1,768	18,286	(896)	165	1,739	1,008	19,294			
2012	29,333	2,941	32,274	(1,549)	323	3,072	1,846	34,120			
2013	47,064	4,163	51,227	(1,998)	410	6,153	4,565	55,792			
2014	64,635	9,026	73,661	(2,357)	442	10,695	8,780	82,441			
2015	80,321	22,157	102,478	(3,177)	615	14,895	12,333	114,811			
2016	81,344	36,341	117,685	(3,884)	706	19,801	16,623	134,308			
2017	145,971	63,905	209,876	(7,765)	1,469	38,603	32,307	242,183			
PAYs (sub-total):	509,477	156,861	666,338	(24,620)	4,711	100,747	80,838	747,176			
CAY (2018)	133,418	187,252	320,670	(12,827)	2,565	58,798	48,536	369,206			
claims liabilities:	642,895	344,113	987,008	(37,447)	7,276	159,545	129,374	1,116,382			
	Unearned Premium	Premium Defiency / (DPAC)	Total Provision	discount	investment PfAD	development PfAD	Total apvs	TOTAL*			
premium liabilities:	218,962	59,194	278,156	(9,162)	1,666	39,734	32,238	310,394			
				*Tot	al may not be s	um of parts, as ap	vs apply to future	costs within UPR			
policy liabilities:			1,265,164	(46,609)	8,942	199,279	161,612	1,426,776			



# Exhibit C-2 Alberta Grid RSP Projected Policy Liabilities

Alberta Grid		Projected Balances as at Dec. 31, 2017 (\$000s)										
ending 2017	ı	nominal values	5	actuari	actuarial present value adjustments (apvs)							
Acc Yr	Case	IBNR	Total Unpaid	discount	investment PfAD	development PfAD	Total apvs	TOTAL				
2004	-	(80)	(80)	-	-	8	8	(72				
2005	1,280	(25)	1,255	(24)	5	123	104	1,359				
2006	706	(183)	523	(11)	2	51	42	565				
2007	2,594	74	2,668	(53)	13	262	222	2,890				
2008	1,982	(242)	1,740	(37)	7	170	140	1,880				
2009	2,927	851	3,778	(98)	19	368	289	4,067				
2010	7,116	960	8,076	(242)	48	784	590	8,666				
2011	11,004	2,576	13,580	(353)	68	1,323	1,038	14,618				
2012	13,056	3,934	16,990	(442)	85	1,655	1,298	18,288				
2013	17,583	6,790	24,373	(658)	146	2,371	1,859	26,232				
2014	23,943	11,141	35,084	(1,088)	246	3,399	2,557	37,641				
2015	36,571	14,202	50,773	(1,777)	355	6,125	4,703	55,476				
2016	40,106	18,479	58,585	(2,226)	469	6,988	5,231	63,816				
PAYs (sub-total):	158,868	58,477	217,345	(7,009)	1,463	23,627	18,081	235,426				
CAY (2017)	49,304	38,348	87,652	(3,243)	701	9,960	7,418	95,070				
claims liabilities:	208,172	96,825	304,997	(10,252)	2,164	33,587	25,499	330,496				
	Unearned Premium	Premium Defiency / (DPAC)	Total Provision	discount	investment PfAD	development PfAD	Total apvs	TOTAL*				
premium liabilities:	92,711	(9,092)	83,619	(2,584)	584	8,078	6,078	89,697				
				*Tot	al may not be s	um of parts, as ap	vs apply to future	costs within UPR				
policy liabilities:			388,616	(12,836)	2,748	41.665	31,577	420,193				



# Exhibit C-2 Alberta Grid RSP Projected Policy Liabilities

Alberta Grid			Project	ted Balances as	at Dec. 31, 201	8 (\$000s)			
ending 2018	ı	nominal values	5	actuari	actuarial present value adjustments (apvs)				
Acc Yr	Case	IBNR	Total Unpaid	discount	investment PfAD	development PfAD	Total apvs	TOTAL	
2004	-	(80)	(80)	-	-	8	8	(72	
2005	893	(21)	872	-	-	87	87	959	
2006	504	(141)	363	(7)	1	35	29	392	
2007	1,790	60	1,850	(39)	7	181	149	1,999	
2008	1,395	(187)	1,208	(24)	6	119	101	1,309	
2009	1,968	654	2,622	(55)	10	256	211	2,833	
2010	4,865	738	5,603	(146)	28	545	427	6,030	
2011	7,444	1,980	9,424	(283)	57	914	688	10,112	
2012	8,703	3,024	11,727	(305)	59	1,143	897	12,624	
2013	11,867	5,219	17,086	(444)	85	1,665	1,306	18,392	
2014	16,542	8,305	24,847	(671)	149	2,418	1,896	26,743	
2015	26,965	9,739	36,704	(1,138)	257	4,446	3,565	40,269	
2016	33,870	9,358	43,228	(1,513)	303	5,172	3,962	47,190	
2017	44,839	15,344	60,183	(2,287)	481	6,832	5,026	65,209	
PAYs (sub-total):	161,645	53,992	215,637	(6,912)	1,443	23,821	18,352	233,989	
CAY (2018)	35,640	67,137	102,777	(3,803)	822	11,679	8,698	111,475	
claims liabilities:	197,285	121,129	318,414	(10,715)	2,265	35,500	27,050	345,464	
	Unearned Premium	Premium Defiency / (DPAC)	Total Provision	discount	investment PfAD	development PfAD	Total apvs	TOTAL*	
premium liabilities:	97,982	(7,696)	90,286	(2,789)	630	8,719	6,560	96,846	
				*Tot	al may not be s	um of parts, as ap	vs apply to future	costs within UPR	
policy liabilities:			408,700	(13,504)	2,895	44,219	33,610	442,310	



# Exhibit C-3 Alberta Non-Grid RSP Projected Policy Liabilities

Alberta non-Grid		Projected Balances as at Dec. 31, 2017 (\$000s)										
ending 2017	ı	nominal values	5	actuari	actuarial present value adjustments (apvs)							
Acc Yr	Case	IBNR	Total Unpaid	discount	investment PfAD	development PfAD	Total apvs	TOTAL				
2004	26	36	62		-	6	6	68				
2005	67	(41)	26	-	-	3	3	29				
2006	1,311	17	1,328	(25)	5	130	110	1,438				
2007	684	198	882	(18)	4	86	72	954				
2008	282	59	341	(7)	1	33	27	368				
2009	1,734	355	2,089	(54)	13	204	163	2,252				
2010	2,190	450	2,640	(77)	16	256	195	2,835				
2011	4,462	448	4,910	(147)	29	476	358	5,268				
2012	8,749	1,650	10,399	(312)	62	1,009	759	11,158				
2013	11,722	1,772	13,494	(418)	81	1,307	970	14,464				
2014	15,362	4,919	20,281	(608)	122	1,967	1,481	21,762				
2015	18,423	9,000	27,423	(932)	192	3,311	2,571	29,994				
2016	23,168	13,745	36,913	(1,366)	295	4,443	3,372	40,285				
PAYs (sub-total):	88,180	32,608	120,788	(3,964)	820	13,231	10,087	130,875				
CAY (2017)	38,823	18,082	56,905	(1,992)	398	6,315	4,721	61,626				
claims liabilities:	127,003	50,690	177,693	(5,956)	1,218	19,546	14,808	192,501				
	Unearned Premium	Premium Defiency / (DPAC)	Total Provision	discount	investment PfAD	development PfAD	Total apvs	TOTAL*				
premium liabilities:	46,499	5,051	51,550	(1,232)	256	4,460	3,484	55,034				
				*Tot	al may not be s	um of parts, as ap	vs apply to future	costs within UPF				
policy liabilities:			229,243	(7,188)	1,474	24,006	18,292	247,535				



# Exhibit C-3 Alberta Non-Grid RSP Projected Policy Liabilities

Alberta non-Grid			Projec	ted Balances as a	at Dec. 31, 201	8 (\$000s)		
ending 2018	ı	nominal values	s	actuari	al present val	ue adjustments	(apvs)	
Acc Yr	Case	IBNR	Total Unpaid	discount	investment PfAD	development PfAD	Total apvs	TOTAL
2004	26	36	62	-	-	6	6	68
2005	54	(29)	25	-	-	2	2	27
2006	1,024	17	1,041	-	-	104	104	1,145
2007	536	156	692	(13)	3	68	58	750
2008	220	47	267	(5)	1	26	22	289
2009	1,361	278	1,639	(34)	7	161	134	1,773
2010	1,717	353	2,070	(54)	12	202	160	2,230
2011	3,509	344	3,853	(112)	23	374	285	4,138
2012	6,890	1,269	8,159	(245)	49	792	596	8,755
2013	9,226	1,363	10,589	(318)	64	1,027	773	11,362
2014	12,048	3,704	15,752	(488)	95	1,526	1,133	16,885
2015	13,798	6,433	20,231	(607)	121	2,453	1,967	22,198
2016	16,504	8,310	24,814	(844)	174	2,997	2,327	27,141
2017	24,907	9,936	34,843	(1,289)	279	3,859	2,849	37,692
PAYs (sub-total):	91,820	32,217	124,037	(4,009)	828	13,597	10,416	134,453
CAY (2018)	40,841	14,510	55,351	(1,937)	387	6,142	4,592	59,943
claims liabilities:	132,661	46,727	179,388	(5,946)	1,215	19,739	15,008	194,396
	Unearned Premium	Premium Defiency / (DPAC)	Total Provision	discount	investment PfAD	development PfAD	Total apvs	TOTAL*
premium liabilities:	50,452	6,954	57,406	(1,371)	285	4,967	3,881	61,287
				*Tot	al may not be s	um of parts, as ap	vs apply to future	costs within UPR
policy liabilities:			236,794	(7,317)	1,500	24,706	18,889	255,683



# Exhibit C-4 New Brunswick RSP Projected Policy Liabilities

New Brunswick	Projected Balances as at Dec. 31, 2017 (\$000s)										
ending 2017	ı	nominal values	i	actuari	actuarial present value adjustments (apvs)						
Acc Yr	Case	IBNR	Total Unpaid	discount	investment PfAD	development PfAD	Total apvs	TOTAL			
2005	-	(2)	(2)	-	-	-	-	(2)			
2006	-	-	-	-	-	-	-	-			
2007	4	28	32	(1)	-	3	2	34			
2008	79	62	141	(2)	-	14	12	153			
2009	186	58	244	(5)	1	24	20	264			
2010	1,521	44	1,565	(33)	8	153	128	1,693			
2011	1,537	(60)	1,477	(31)	6	145	120	1,597			
2012	675	158	833	(19)	3	81	65	898			
2013	2,050	162	2,212	(55)	11	215	171	2,383			
2014	1,706	550	2,256	(61)	14	220	173	2,429			
2015	1,101	753	1,854	(61)	13	219	171	2,025			
2016	807	1,578	2,385	(93)	19	275	201	2,586			
PAYs (sub-total):	9,666	3,331	12,997	(361)	75	1,349	1,063	14,060			
CAY (2017)	2,777	1,270	4,047	(166)	36	446	316	4,363			
claims liabilities:	12,443	4,601	17,044	(527)	111	1,795	1,379	18,423			
	Unearned Premium	Premium Defiency / (DPAC)	Total Provision	discount	investment PfAD	development PfAD	Total apvs	TOTAL*			
premium liabilities:	7,756	(1,965)	5,791	(146)	28	507	389	6,180			
				*Tot	al may not be s	um of parts, as ap	vs apply to future	costs within UPR			
policy liabilities:			22,835	(673)	139	2,302	1,768	24,603			



# Exhibit C-4 New Brunswick RSP Projected Policy Liabilities

New Brunswick		Projected Balances as at Dec. 31, 2018 (\$000s)										
ending 2018	1	nominal values	i	actuari	actuarial present value adjustments (apvs)							
Acc Yr	Case	IBNR	Total Unpaid	discount	investment PfAD	development PfAD	Total apvs	TOTAL				
2005	-	(2)	(2)	-	-	-	-	(2				
2006	-	-	-	-	-	-	-	-				
2007	8	24	32	-	-	3	3	35				
2008	79	50	129	(2)	-	13	11	140				
2009	174	46	220	(4)	1	22	19	239				
2010	1,356	32	1,388	(26)	6	136	116	1,504				
2011	1,358	(48)	1,310	(28)	7	128	107	1,417				
2012	616	122	738	(16)	3	72	59	797				
2013	1,833	128	1,961	(45)	8	191	154	2,115				
2014	1,519	441	1,960	(49)	10	191	152	2,112				
2015	904	565	1,469	(40)	9	174	143	1,612				
2016	568	1,104	1,672	(55)	12	194	151	1,823				
2017	1,669	837	2,506	(98)	20	277	199	2,705				
PAYs (sub-total):	10,084	3,299	13,383	(363)	76	1,401	1,114	14,497				
CAY (2018)	3,397	2,822	6,219	(255)	56	686	487	6,706				
claims liabilities:	13,481	6,121	19,602	(618)	132	2,087	1,601	21,203				
	Unearned Premium	Premium Defiency / (DPAC)	Total Provision	discount	investment PfAD	development PfAD	Total apvs	TOTAL*				
premium liabilities:	9,268	(2,251)	7,017	(177)	34	614	471	7,488				
				*Tot	al may not be s	um of parts, as ap	vs apply to future	costs within UPR				
policy liabilities:			26,619	(795)	166	2,701	2,072	28,691				



### Exhibit C-5 Nova Scotia RSP Projected Policy Liabilities

Nova Scotia	Projected Balances as at Dec. 31, 2017 (\$000s)								
ending 2017	r	nominal values	<b>i</b>	actuari	al present val	ue adjustments	(apvs)		
Acc Yr	Case	IBNR	Total Unpaid	discount	investment PfAD	development PfAD	Total apvs	TOTAL	
2007	37	1	38	(1)	-	4	3	41	
2008	12	1	13	-	-	1	1	14	
2009	106	7	113	(1)	-	11	10	123	
2010	133	3	136	(2)	1	14	13	149	
2011	1,096	(16)	1,080	(24)	5	106	87	1,167	
2012	2,715	381	3,096	(80)	15	302	237	3,333	
2013	3,919	(120)	3,799	(99)	23	370	294	4,093	
2014	2,701	181	2,882	(72)	14	348	290	3,172	
2015	2,757	1,925	4,682	(131)	28	565	462	5,144	
2016	3,597	2,759	6,356	(210)	44	756	590	6,946	
PAYs (sub-total):	17,073	5,122	22,195	(620)	130	2,477	1,987	24,182	
CAY (2017)	7,618	4,116	11,734	(422)	82	1,357	1,017	12,751	
claims liabilities:	24,691	9,238	33,929	(1,042)	212	3,834	3,004	36,933	
	Unearned Premium	Premium Defiency / (DPAC)	Total Provision	discount	investment PfAD	development PfAD	Total apvs	TOTAL*	
premium liabilities:	17,413	(1,021)	16,392	(515)	113	1,650	1,248	17,640	
				*Tot	al may not be s	um of parts, as ap	vs apply to future	costs within UPR	
policy liabilities:			50,321	(1,557)	325	5,484	4,252	54,573	



### Exhibit C-5 Nova Scotia RSP Projected Policy Liabilities

Nova Scotia	Projected Balances as at Dec. 31, 2018 (\$000s)							
ending 2018	nominal values			actuarial present value adjustments (apvs)				
Acc Yr	Case	IBNR	Total Unpaid	discount	investment PfAD	development PfAD	Total apvs	TOTAL
2007	37	1	38	(1)	-	4	3	41
2008	12	1	13	-	-	1	1	14
2009	94	7	101	(1)	-	10	9	110
2010	121	3	124	(1)	-	12	11	135
2011	973	(16)	957	(17)	4	94	81	1,038
2012	2,444	300	2,744	(60)	14	268	222	2,966
2013	3,464	(96)	3,368	(88)	17	328	257	3,625
2014	2,420	134	2,554	(66)	15	309	258	2,812
2015	2,785	1,241	4,026	(101)	20	487	406	4,432
2016	3,419	1,517	4,936	(138)	30	590	482	5,418
2017	5,690	2,030	7,720	(255)	54	895	694	8,414
PAYs (sub-total):	21,459	5,122	26,581	(728)	154	2,998	2,424	29,005
CAY (2018)	12,536	10,095	22,631	(815)	158	2,618	1,961	24,592
claims liabilities:	33,995	15,217	49,212	(1,543)	312	5,616	4,385	53,597
	Unearned Premium	Premium Defiency / (DPAC)	Total Provision	discount	investment PfAD	development PfAD	Total apvs	TOTAL*
premium liabilities:	21,764	(763)	21,001	(659)	144	2,115	1,600	22,601
				*Tot	al may not be s	um of parts, as ap	vs apply to future	costs within UPR
policy liabilities:			70,213	(2,202)	456	7,731	5,985	76,198