ALBERTA NON-GRID RISK SHARING POOL

APRIL 2017 OPERATIONAL REPORT

ACTUARIAL HIGHLIGHTS

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FACILITY Association

ACTUARIAL HIGHLIGHTS

RSP ALBERTA NON-GRID

OPERATIONAL REPORT

APRIL 2017

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1 Summary

1.1 Valuation Schedule (Fiscal Year 2017)

The April 2017 Operational Report leverages actuarial assumptions consistent with last month (that is, it does not reflect the results of an updated valuation). The table immediately below summarizes the implemented valuations and future scheduled valuations for fiscal year 2017.

ALBERTA NON-GRID RISK SHARING POOL FISCAL YEAR 2017 – SCHEDULE OF VALUATIONS			
Valuation Date	**Discount Rate (per annum)**	**Operational Report**	**Description of Changes**
Sep. 30, 2016 (completed)	0.55% mfad: 25 bp	Oct. 2016	updated valuation (roll forward): accident year 2016 loss ratio increased 7.2 points to 112.8%; discount rate decreased by 6 basis points; no change to selected margins for adverse deviations
Dec. 31, 2016 (completed)	1.08% mfad: 25 bp	Mar. 2017	updated valuation: accident year 2016 loss ratio increased 1.1 points to 113.9%; accident year 2017 loss ratio increased 5.0 points to 103.3%; discount rate increased by 53 basis points; no change to selected margins for adverse deviations
Mar. 31, 2017		May 2017	update valuation (roll forward):
Jun. 30, 2017		Aug. 2017	update valuation:
Sep. 30, 2017		Oct. 2017	update valuation (roll forward):

Under the proposed schedule for fiscal year 2017, the "off-half" valuation quarters ending March 31, 2017 and September 30, 2017 would not reflect a full valuation update of assumptions, but would rather "roll-forward" key assumptions from the previous valuation.

1.2 Appointed Actuary and Hybrid Actuarial Services Model

Liam McFarlane of Ernst & Young LLP is Facility Association's Appointed Actuary (effective as of June 1, 2013).

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

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

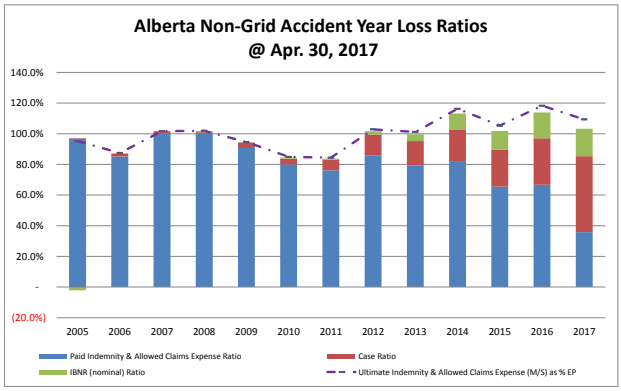
Consideration and assessment of potential impacts of legal decisions and changes in legislation /

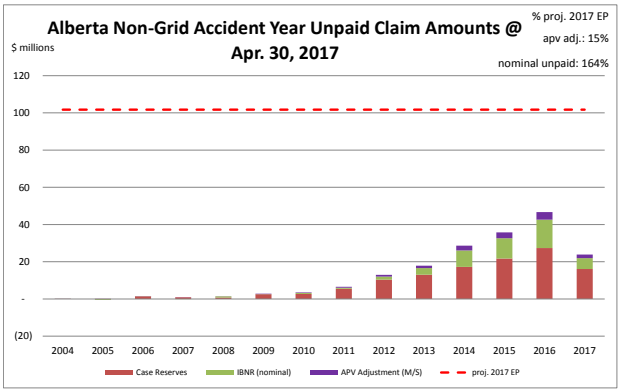
regulation constitutes a regular part of the valuation process. Descriptions of some of the more recent changes are provided below (there have been no changes in these descriptions since last month's Highlights).

Alberta Bill 39 (Enhancing Consumer Protection in Auto Insurance Act) was introduced into the Legislature by the Minister of Finance on November 6, 2013, and received Royal Assent on December 11, 2013. Bill 39 includes various amendments and provisions such as allowing for both mandatory and optional auto insurance premiums to be regulated by the independent Automobile Insurance Rate Board (AIRB), the introduction of an Insurer file and approve system for premium adjustments instead of an annual industry-wide rate adjustment, improved access to health care after a collision and strengthened Insurance Company solvency requirements. No specific adjustments have been made to the most recent valuation (December 31, 2016) assumptions based on Bill 39.

1.4 Current Provision Summary

The charts immediately below show the current levels of claim liabilities[1] booked by accident year[2]. The left chart displays life-to-date payments, case reserves, IBNR, and the total including actuarial present value adjustments against accident year earned premium. The right chart shows the associated dollar amounts for the components of the claim liabilities and the current projected amount of 2017 full year earned premium (the red hash-mark line) to provide some perspective.





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

The current actuarial present value adjustments balance ($15.1 million – see table at top of next page) represents 15% of the earned premium projected for the full year 2017 (see the upper right corner of the right chart above). If our current estimates of the nominal unpaid amounts prove to match actual claims payments, the actuarial present value adjustments will be released into the net operating result over future periods.

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

[2]Accident year 2004 was an incomplete year and therefore has been excluded from the loss ratio chart.

claim liabilities ($000s)

	amt	%
case	119,892	65.7%
ibnr	47,324	26.0%
M/S apv adjust.	15,146	8.3%
M/S total	182,362	100.0%

The table to the left breaks down the Member Statement (M/S) claim liabilities total into component parts, showing that the majority of the claim liabilities is in case reserves for this pool. Approximately 45% of the IBNR balance relates to accident years 2016 and 2017 (see Exhibit B). Approximately 84% of the M/S total claim liabilities are related to accident years 2013-2017 inclusive (i.e. the most recent 5 accident years).

The tables immediately below summarize the premium liabilities and the total policy liabilities.

premium liabilities ($000s)

	amt	%
unearned prem	48,628	89.8%
prem def/(dpac)	1,965	3.6%
M/S apv adjust.	3,578	6.6%
M/S total	54,171	100.0%

policy liabilities ($000s)

	amt	%
claim	167,216	70.7%
premium	50,593	21.4%
M/S apv adjust.	18,724	7.9%
M/S total	236,533	100.0%

2 Activity During the Month of April 2017

2.1 Recorded Premium and Claims Activity

The table immediately below summarizes the extent to which premiums and claims amounts recorded during the month differ from projections reflected in the prior month's Operational Report[3].

Alberta Non-Grid RSP Actual vs Projected Summary: Recorded Transaction Amounts ($ thousands)

Table 01	Earned Premium		Paid Indemnity & Allowed Claims Expense		Case increase / (decrease)		Recorded increase / (decrease)	
Accident Year	Actual	Actual less Projected	Actual	Actual less Projected	Actual	Actual less Projected	Actual	Actual less Projected
Prior	(1)	(1)	2,992	1,534	(2,909)	(1,516)	83	18
2015	0	0	479	(184)	180	785	659	601
2016	(36)	(36)	1,045	170	(1,837)	(1,035)	(792)	(865)
2017	8,107	(80)	3,645	(617)	1,755	(533)	5,400	(1,150)
TOTAL	8,070	(117)	8,162	903	(2,812)	(2,300)	5,350	(1,396)

(Recorded transaction amounts exclude IBNR & other actuarial provisions)

Claims transaction activity is generally volatile and changes from one month to the next are anticipated due to this natural "process variance". Each month, the projection variances are reviewed for signs of projection bias and to identify potential ways to reduce the level of the variance. Commentary from our review is provided in the sub-sections that follow.

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

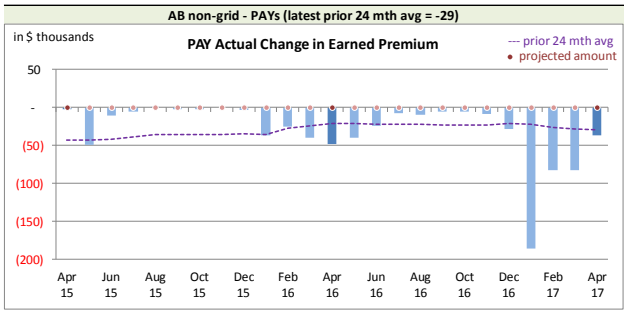
The charts at the top of the next page show actual **earned premium**[4] activity in each of the most recent 25 calendar months, along with a "prior 24-month average" to show how each month's actual

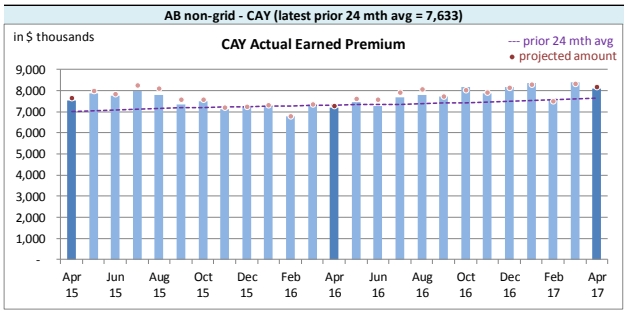
[3]There may be rounding differences in values in this document compared with the associated Bulletin and/or Operational Report.

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

compares with the average amount of the preceding 24 calendar months.

*Alberta non-Grid RSP Actual **Earned Premium** by Calendar Month*

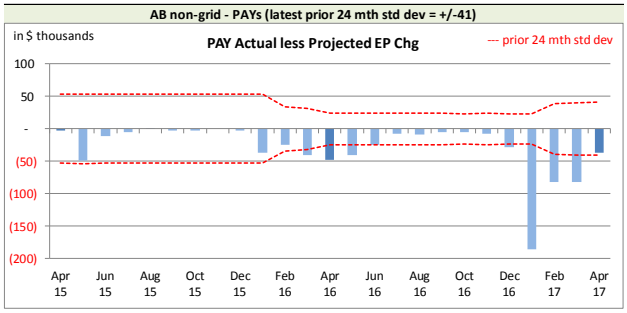


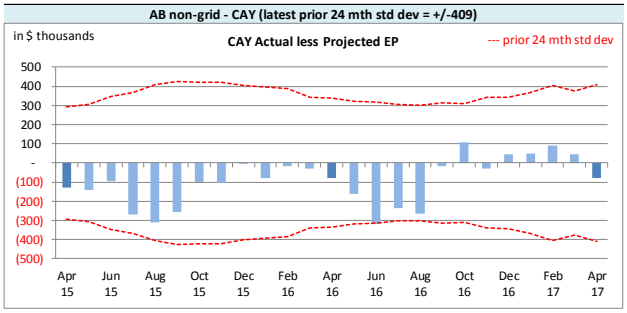


Earned premium changes during a given calendar month in relation to prior accident years tend to be at modest levels, although relatively high levels seem to occur at the beginning of each year.

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

*Alberta non-Grid RSP Actual vs. Projected Summary: **Earned Premium** Variances by Calendar Month*





On Latest $ thousands		
Earned Premium	PAYs	CAY
Mthly Avg EP Chg (prior 24 mths)	(29)	7,633
std dev	41	409
A-P <> std dev	7	1
% <> std dev	28.0%	4.0%
norm <> std dev	31.7%	31.7%

We project **earned premium** changes from known unearned premium and projected written premium levels, but upload the total projections as current accident year (CAY). This process has generated prior accident years' bias[5], with actuals generally lower than projected. However, the magnitude is not high relative to monthly premium. In addition to the prior accident years' bias, the CAY has also shown bias, with actuals being generally lower than projected. Starting with the August 2016 projections, we have modified our projections processes in an attempt to account for CAY bias. Over time, we may consider other projection approaches to narrow monthly variance levels further, but it is not currently

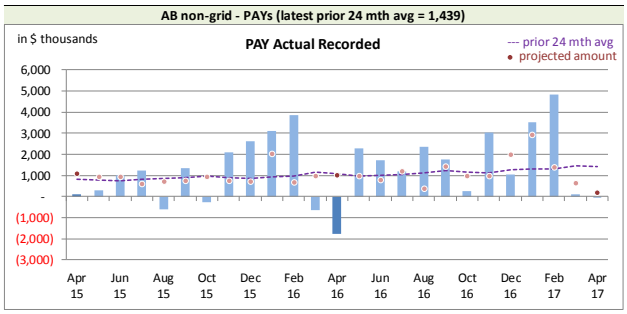
[5]The prior accident years (PAYs) variances will show bias as the projection upload forces all earned premium projections to be attributed to the current accident year.

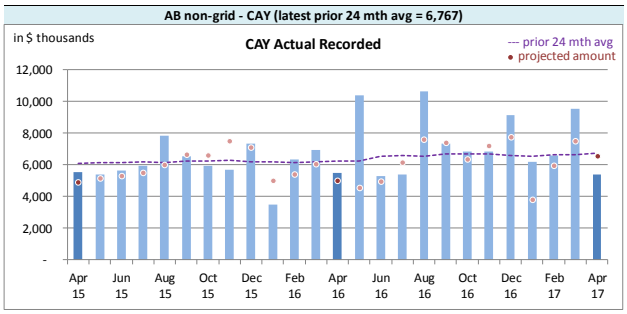
deemed a priority.

2.1.b AvsP: Recorded Indemnity & Allowed Claims Expense

Actual **recorded** activity (**paid** and case reserve changes) over the last 25-month period is shown in the charts immediately below, including the "prior 24-month average" level.

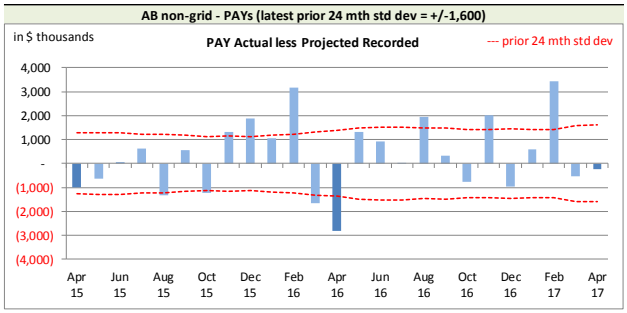
*Alberta non-Grid RSP Actual **Recorded** by Calendar Month*

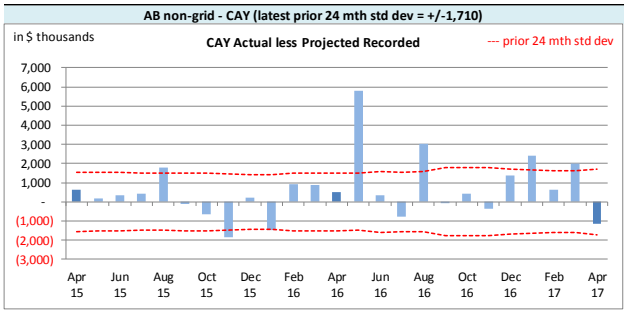




Recorded activity variances from the previous month's projections are shown in the charts immediately below, including the "prior 24-month standard deviation" levels.

*Alberta non-Grid RSP Actual vs Projected Summary: **Recorded** Variances by Calendar Month*





On Latest $ thousands		
Recorded	PAYs	CAY
Mthly Avg Recorded (prior 24 mths)	1,439	6,767
std dev	1,600	1,710
A-P <> std dev	10	7
% <> std dev	40.0%	28.0%
norm <> std dev	31.7%	31.7%

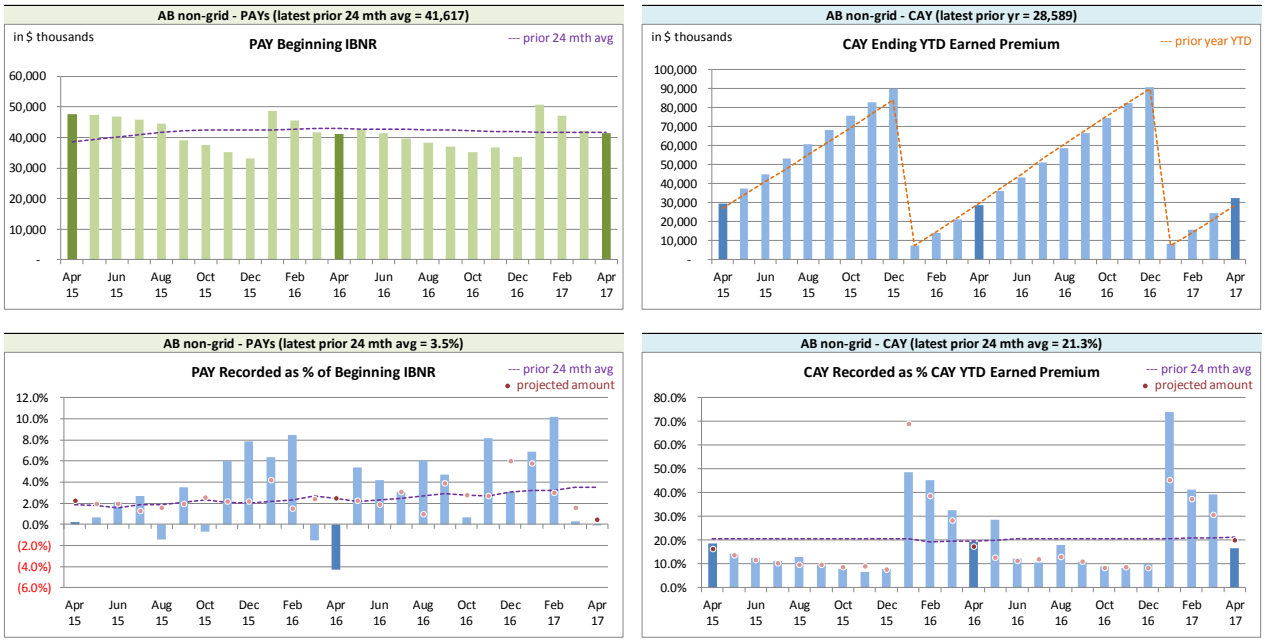
With respect to **recorded** indemnity & allowed claims expense activity, 40% of the prior accident years' (PAYs) variances (left chart above) fell outside of the experience period's standard deviation, suggesting the projection process performs worse than a projection based simply on the 24-month average. We are looking at options in an attempt to address this.

The current accident year (CAY) **recorded** variances (right chart above) have been greater than one standard deviation 28% of the time, suggesting that the projection process is little better than simply projecting the most recent prior 24-month average.

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

We have included, for reference, additional charts at the top of the next page related to levels influencing **recorded** activity.

Alberta non-Grid RSP Levels that influence[6] ***Recorded*** *activity by Calendar Month*



We track beginning prior accident years' IBNR as **recorded** activity "comes out of" IBNR. Changes in the prior accident years' beginning IBNR (see upper left chart above) occur for several possible reasons:

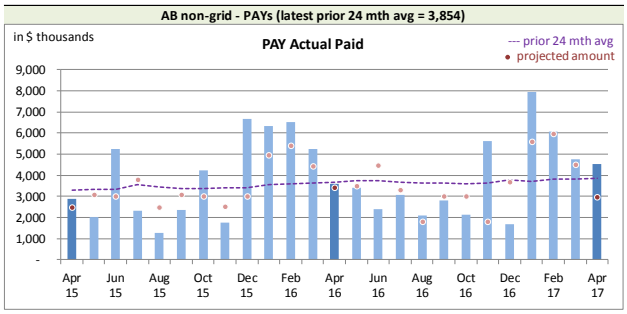
- to offset actual **recorded** activity (through loss ratio matching);
- the annual switchover as a current accident year becomes a prior accident year (occurs in January); and
- when a new valuation is implemented, where the valuation resulted in changes to the selection of prior accident years' ultimate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

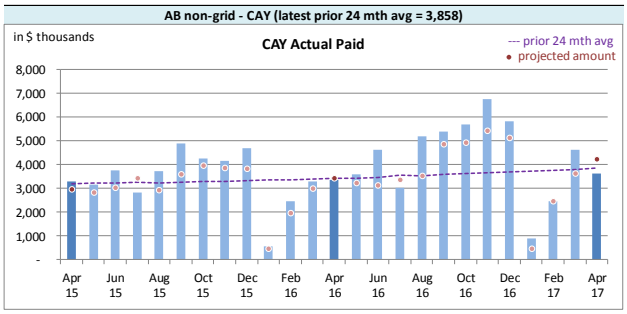
2.1.c AvsP: Paid Indemnity & Allowed Claims Expense

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

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

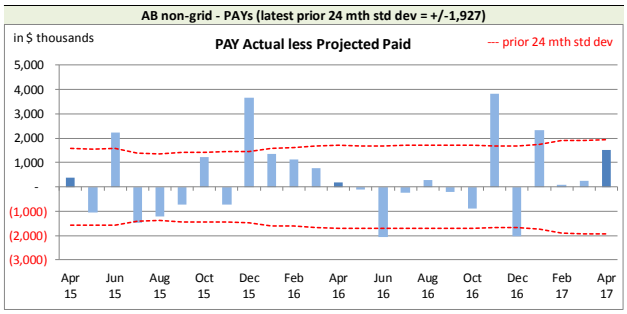
*Alberta non-Grid RSP Actual **Paid** activity by Calendar Month*

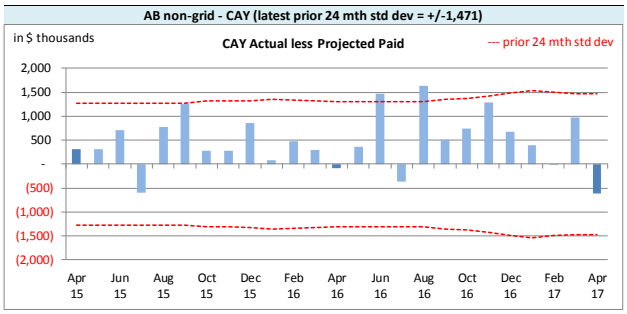




The charts immediately below show the actual less projected **paid** variances for the last 25 calendar months, along with bands for the "prior 24-month standard deviations" to show how the variances from projection compare with historical standard deviations.

*Alberta non-Grid RSP Actual vs Projected Summary: **Paid** Variances by Calendar Month*





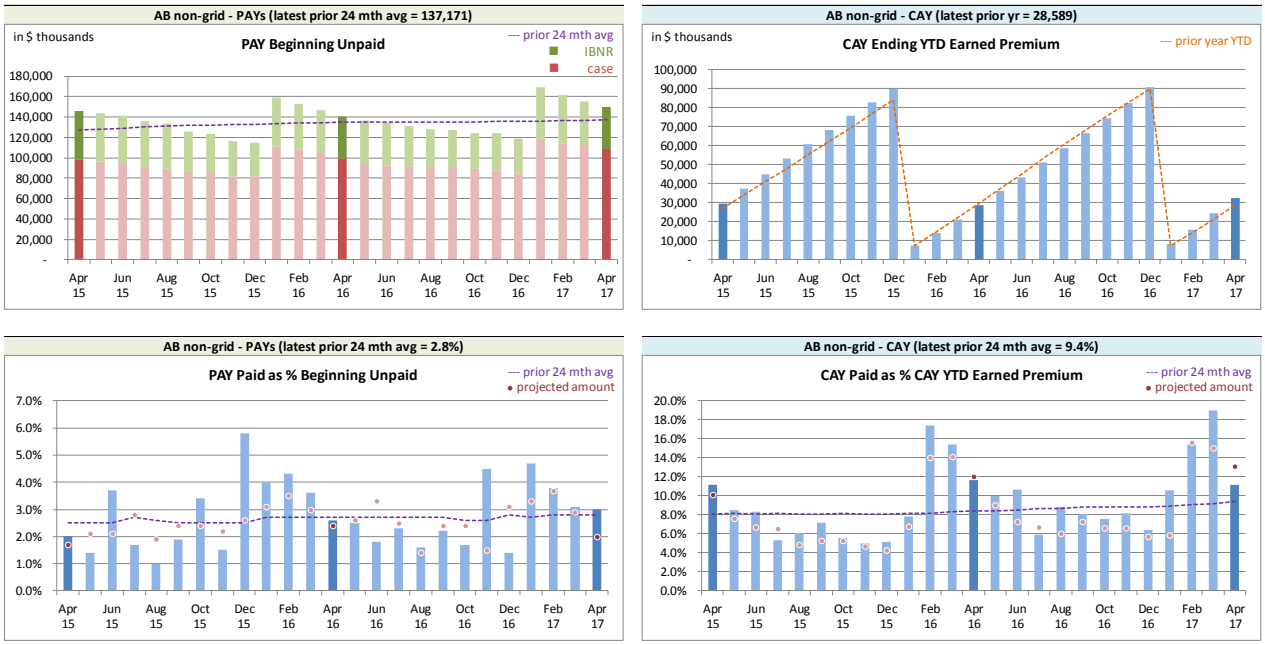
On Latest $ thousands		
Paid	PAYs	CAY
Mthly Avg Paid (prior 24 mths)	3,854	3,858
std dev	1,927	1,471
A-P <> std dev	7	2
% <> std dev	28.0%	8.0%
norm <> std dev	31.7%	31.7%

With respect to **paid** indemnity & allowed claims expense, the prior accident years' variances (left chart above) do not appear to have bias and the magnitude of the variances do not appear to be an issue. With 28% of prior accident years (PAYs) **paid** variances over the last 25 calendar months falling outside of one standard deviation, the projection process appears to have performed little better than simply projecting based on a 24-month average.

With only 8% of the current accident year (CAY) **paid** variances falling outside of one standard deviation of the experience period activity, the projection process appears to perform better than simply projecting based on a 24-month average. However, there does appear to be evidence of bias (actuals tend to be higher than our projections) and we are considering options on how to address this.

We have included, for reference, additional charts at the top of the next page related to levels influencing **paid** activity.

*Alberta non-Grid RSP Levels that influence[7] **Paid** activity by Calendar Month*



We track beginning prior accident years' unpaid balance (case and IBNR) as **paid** activity "comes out of" the unpaid balance. Changes in the prior accident years' beginning unpaid balance (see upper left chart above) occur for several possible reasons:

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

2.2 Actuarial Provisions

An "ultimate loss ratio matching method" (described in section 3) is used to determine the month's IBNR[8], and factors are applied to the nominal unpaid claims liability (case plus IBNR) to determine the discount amount (shown as a negative value to indicate its impact of reducing the liability) and the Provisions for Adverse Deviations. The loss ratios and the factors used to determine the projections and actuals were based on the applicable valuation. The table at the top of the next page summarizes variances in provisions included in the April 2017 Operational Report and the associated one-month projections from last month's Report.

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

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

Alberta Non-Grid RSP Actual vs Projected Summary: IBNR and APV Amounts ($ thousands)

Table 02

	IBNR		actuarial present value adjustments					
			Discount Amount		Provisions for Adverse Deviations		IBNR + actuarial present value adjustments	
Accident Year	Actual	Actual less Projected	Actual	Actual less Projected	Actual	Actual less Projected	Actual	Actual less Projected
Prior	15,357	(19)	(1,873)	43	7,944	(173)	21,428	(149)
2015	10,895	(601)	(1,012)	(6)	4,152	24	14,035	(583)
2016	15,264	824	(1,450)	8	5,450	(27)	19,264	805
2017	5,808	1,067	(701)	(17)	2,636	64	7,743	1,114
TOTAL	47,324	1,271	(5,036)	28	20,182	(112)	62,470	1,187

The IBNR provision is $1.3 million higher than projected from last month, counterbalancing the recorded claims activity and adjusting for the earned premium variance impacts indicated in section 2.1.

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

(i) the change projected last month;

(ii) the additional change due to variances in earned premium (because we apply a loss ratio to earned premium in determining ultimate level) and/or recorded claims (as IBNR is calculated as ultimate less recorded) differences; and

(iii) the additional change due to valuation implementation impacts (as applicable)

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

The table below summarizes the variances in the provisions for premium deficiency liability / (deferred policy acquisition cost asset) included in the April 2017 Operational Report and the one-month projections from last month's Report. This RSP is in a premium deficiency position (shown as a positive amount) prior to and after actuarial present value adjustments. Actuarial present value adjustments increase the liability value as the adjustments increase the expected future policy obligations (costs) associated with the unearned premium. Variances are mainly driven by the unearned premium variance.

Alberta Non-Grid RSP Actual vs Projected Summary: Premium Deficiency / (DPAC) Amounts ($ thousands)

Table 03

	Premium Deficiency / (Deferred Policy Acquisition Costs)		actuarial present value adjustments		Premium Deficiency / (DPAC) including actuarial present value adjustments	
	Actual	Actual less Projected	Actual	Actual less Projected	Actual	Actual less Projected
balance:	1,965	(25)	3,578	(44)	5,543	(69)
balance as % unearned premium:	4.0%	-	7.4%	-	11.4%	-
actual unearned premium:	48,628					
less projected:	(617)					

3 Ultimate Loss Ratio Matching Method

An "ultimate loss ratio matching method" continues to be applied to the current month and two

projected months shown in the Operational Reports, with IBNR determined by accident year as follows:

(a) Earned premium to-date
(b) Ultimate loss[9] ratio per latest valuation
(c) Estimated ultimate incurred = (a) x (b)
(d) Recorded indemnity & allowed claims expense to-date
(e) IBNR = (c) – (d)

4 Calendar Year-to-Date Results

The table below summarizes the calendar year-to-date results for indemnity & allowed claims expenses[10], including IBNR.

In calculating the amounts as percentages of earned premium, the calendar year-to-date earned premium has been used, which includes earned premium associated with the current accident year but also earned premium adjustments related to prior accident years. Specifically, the current accident year (CAY) ratio in the table is 104.5% rather than 103.3% (the valuation ultimate ratio for accident year 2017), as the calendar year-to-date earned premium includes prior accident year earned premium adjustments. (Note that the ratios in this table may differ slightly from those shown in the Alberta Non-Grid RSP Summary of Operations due to rounding.)

Alberta Non-Grid RSP Calendar Year-to-Date Indemnity & Allowed Claims Expense Summary
($ thousands)

Table 04	YTD Nominal Values		YTD actuarial present value adjustment		YTD Total		Change from Prior Month YTD	
	Amount	% EP	Amount	% EP	Amount	% EP	Amount	LR pts
PAYs	(878)	(2.7%)	(4,347)	(13.5%)	(5,225)	(16.3%)	(442)	3.6%
CAY	33,543	104.5%	1,935	6.0%	35,478	110.6%	8,793	(0.5%)
TOTAL	32,665	101.8%	(2,412)	(7.5%)	30,253	94.3%	8,351	3.1%

("% EP" based on 2017 calendar year-to-date earned premium; ratios may not total due to rounding)

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

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

5 Current Operational Report – Additional Exhibits

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

IBNR (including actuarial present value adjustments) presented in section 6, Exhibit A, were derived

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

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

on a discounted basis, and therefore reflect the time value of money and include an explicit provision for adverse deviations in accordance with accepted actuarial practice in Canada.

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

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

6 EXHIBITS

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

EXHIBIT A	IBNR for Member Sharing – includes Actuarial Present Value Adjustments
EXHIBIT B	IBNR
EXHIBIT C	Premium Liabilities
EXHIBIT D	Projected Year-end Policy Liabilities
EXHIBIT E	Discount Rate & Margins for Adverse Deviations
EXHIBIT F	Interest Rate Sensitivity
EXHIBIT G	Components of IBNR Change During Month

EXHIBIT A

IBNR for Member Sharing – includes Actuarial Present Value Adjustments

TABLE EXHIBIT A

Amounts in $000s

IBNR + M/S actuarial present value adjustments

discount rate
1.08%

interest rate margin
25 basis pts

Accident Year	Actual Mar. 2017	Actual Apr. 2017	Projected May. 2017	Projected Jun. 2017	Projected Dec. 2017
2004	42	42	42	42	42
2005	(480)	(480)	(470)	(461)	(409)
2006	145	145	143	141	127
2007	70	69	68	66	58
2008	735	734	720	706	625
2009	322	261	256	250	221
2010	841	821	805	788	688
2011	788	1,088	1,066	1,045	914
2012	2,724	2,523	2,473	2,423	2,119
2013	4,980	4,854	4,685	4,592	4,007
2014	11,598	11,371	10,967	10,723	9,213
2015	14,740	14,035	13,536	13,159	10,787
2016	18,614	19,264	18,532	17,829	13,766
2017	4,350	7,743	8,826	11,932	27,848
TOTAL	59,469	62,470	61,649	63,235	70,006
Change		3,001	(821)	1,586	

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

EXHIBIT B

IBNR

TABLE EXHIBIT B — Amounts in $000s

IBNR

Ultimate Loss Ratio	Accident Year	Actual Mar. 2017	Actual Apr. 2017	Projected May. 2017	Projected Jun. 2017	Projected Dec. 2017
349.1%	2004	36	36	36	36	36
95.0%	2005	(530)	(530)	(519)	(509)	(451)
87.2%	2006	21	21	21	21	21
101.6%	2007	(5)	(6)	(6)	(6)	(6)
101.8%	2008	623	622	610	598	530
94.3%	2009	111	51	50	49	43
84.5%	2010	582	563	552	541	469
83.8%	2011	256	624	612	600	520
101.6%	2012	1,753	1,593	1,561	1,530	1,328
99.7%	2013	3,698	3,605	3,461	3,392	2,944
113.2%	2014	8,896	8,778	8,427	8,258	7,019
101.8%	2015	11,554	10,895	10,459	10,145	8,145
113.9%	2016	14,513	15,264	14,653	14,067	10,552
103.3%	2017	2,833	5,808	6,468	9,242	22,680
	TOTAL	44,341	47,324	46,385	47,964	53,830
	Change		2,983	(939)	1,579	

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

EXHIBIT C

Premium Liabilities

TABLE EXHIBIT C

Premium Liabilities	Actual Mar. 2017	Actual Apr. 2017	Projected May. 2017	Projected Jun. 2017	Projected Dec. 2017
	Amounts in $000s				
(1) unearned premium (UP)	47,436	48,628	50,242	51,507	52,237
FOR MEMBER SHARING					
(2) expected future costs ratio {% of (1)}	111.3%	111.4%	111.6%	111.8%	113.7%
(3) expected future costs {(1) x (2)}	52,777	54,171	56,055	57,564	59,377
(4) premium deficiency / (deferred policy acquisition cost)	5,341	5,543	5,813	6,057	7,140
Excluding Actuarial Present Value Adjustments					
(5) expected future costs ratio {% of (1)}	103.9%	104.0%	104.2%	104.4%	106.2%
(6) expected future costs {(1) x (5)}	49,293	50,593	52,354	53,764	55,456
(7) premium deficiency / (deferred policy acquisition cost)	1,857	1,965	2,112	2,257	3,219

EXHIBIT D

Projected Year-end Policy Liabilities

The table below presents the projected policy liabilities as at December 31, 2017, broken down by component.

Alberta non-Grid	**Projected Balances as at Dec. 31, 2017 ($000s)**							
ending 2017	**nominal values**			**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	70	(451)	(381)	7	(2)	37	42	(339)
2006	1,217	21	1,238	(21)	5	122	106	1,344
2007	765	(6)	759	(14)	3	75	64	823
2008	646	530	1,176	(26)	6	115	95	1,271
2009	2,172	43	2,215	(49)	11	216	178	2,393
2010	2,322	469	2,791	(70)	17	272	219	3,010
2011	4,649	520	5,169	(140)	31	503	394	5,563
2012	8,898	1,328	10,226	(266)	61	996	791	11,017
2013	11,192	2,944	14,136	(396)	85	1,374	1,063	15,199
2014	15,028	7,019	22,047	(617)	132	2,679	2,194	24,241
2015	19,342	8,145	27,487	(852)	192	3,302	2,642	30,129
2016	23,734	10,552	34,286	(1,166)	240	4,140	3,214	37,500
PAYs (sub-total):	90,061	31,150	121,211	(3,610)	781	13,837	11,008	132,219
CAY (2017)	35,866	22,680	58,546	(1,873)	410	6,631	5,168	63,714
claims liabilities:	125,927	53,830	179,757	(5,483)	1,191	20,468	16,176	195,933
	Unearned Premium	Premium Defiency / (DPAC)	Total Provision	discount	investment PfAD	development PfAD	Total apvs	TOTAL*
premium liabilities:	52,237	3,219	55,456	(1,215)	276	4,860	3,921	59,377
								*Total may not be sum of parts, as apvs apply to future costs within UPR
policy liabilities:			**235,213**	**(6,698)**	**1,467**	**25,328**	**20,097**	**255,310**

EXHIBIT E

Discount Rate & Margins for Adverse Deviations

The tables below present selected margins for adverse development by coverage (the total is a weighted average, based on the unpaid claims projection for December 31, 2017 from the valuation), followed by the selected discount rate and the associated margin for investment income.

Selected Claims Development MfADs (Dec. 31, 2016)

Accident Year	Third Party Liability	Accident Benefits	Other Coverages	Total
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%	9.0%	10.0%
2011	10.0%	10.0%	9.9%	10.0%
2012	10.0%	10.0%	9.0%	10.0%
2013	10.0%	10.0%	10.0%	10.0%
2014	12.5%	10.0%	12.5%	12.5%
2015	12.5%	10.0%	11.6%	12.4%
2016	12.5%	10.0%	12.5%	12.5%
2017	12.1%	10.0%	8.2%	11.7%
prem liab	11.8%	10.0%	5.1%	9.0%

discount rate:	1.08%
margin (basis points):	25

EXHIBIT F

Interest Rate Sensitivity

The tables below present sensitivity to the member statement claims liability as projected to Dec. 31, 2017 from the latest valuation date (projections in exhibits A to D are also to Dec. 31, 2017, but are based on more up-to-date information). We have included both the current valuation selection (1.08%), the prior valuation assumption (0.55%) and the prior fiscal year end valuation assumption (0.55%) for comparative purposes. A 25 basis point margin for investment return adverse deviation is used in all scenarios presented.

$ Format: $000s

	Actuarial Present Value of Provisions at Various Discount Rates - Dec. 31, 2017 projected Unpaid							
AY	0.58%	1.08%	1.58%	2.08%	2.58%	3.08%	0.55%	0.55%
2004	-	-	-	-	-	-	-	-
2005	481	477	473	469	466	462	481	481
2006	882	874	867	860	854	847	882	882
2007	555	551	546	542	538	533	556	556
2008	1,144	1,132	1,120	1,109	1,098	1,087	1,144	1,144
2009	2,191	2,169	2,147	2,125	2,104	2,084	2,192	2,192
2010	2,428	2,400	2,372	2,346	2,320	2,295	2,429	2,429
2011	5,226	5,160	5,096	5,034	4,974	4,914	5,230	5,230
2012	9,856	9,735	9,617	9,503	9,392	9,283	9,862	9,862
2013	14,863	14,670	14,483	14,303	14,126	13,954	14,874	14,874
2014	24,689	24,364	24,052	23,746	23,452	23,161	24,708	24,708
2016	40,567	39,919	39,292	38,683	38,094	37,518	40,605	40,605
2017	61,809	60,880	59,975	59,112	58,265	57,452	61,863	61,863
Total	196,626	193,804	191,064	188,424	185,852	183,350	196,788	196,788
	curr - 50 bp	curr val assumption	curr + 50bp	curr + 100bp	curr + 150bp	curr + 200bp	prior val assumption	prior fyr end assumption

	Dollar Impact Relative to Valuation Assumption							
AY	0.58%	1.08%	1.58%	2.08%	2.58%	3.08%	0.55%	0.55%
Total	2,822	-	(2,740)	(5,380)	(7,952)	(10,454)	2,984	2,984
	curr - 50 bp	curr val assumption	curr + 50bp	curr + 100bp	curr + 150bp	curr + 200bp	prior val assumption	prior fyr end assumption

	Percentage Impact Relative to Valuation Assumption							
AY	0.58%	1.08%	1.58%	2.08%	2.58%	3.08%	0.55%	0.55%
2004	-	-	-	-	-	-	-	-
2005	0.8%	-	(0.8%)	(1.7%)	(2.3%)	(3.1%)	0.8%	0.8%
2006	0.9%	-	(0.8%)	(1.6%)	(2.3%)	(3.1%)	0.9%	0.9%
2007	0.7%	-	(0.9%)	(1.6%)	(2.4%)	(3.3%)	0.9%	0.9%
2008	1.1%	-	(1.1%)	(2.0%)	(3.0%)	(4.0%)	1.1%	1.1%
2009	1.0%	-	(1.0%)	(2.0%)	(3.0%)	(3.9%)	1.1%	1.1%
2010	1.2%	-	(1.2%)	(2.3%)	(3.3%)	(4.4%)	1.2%	1.2%
2011	1.3%	-	(1.2%)	(2.4%)	(3.6%)	(4.8%)	1.4%	1.4%
2012	1.2%	-	(1.2%)	(2.4%)	(3.5%)	(4.6%)	1.3%	1.3%
2013	1.3%	-	(1.3%)	(2.5%)	(3.7%)	(4.9%)	1.4%	1.4%
2014	1.3%	-	(1.3%)	(2.5%)	(3.7%)	(4.9%)	1.4%	1.4%
2016	1.6%	-	(1.6%)	(3.1%)	(4.6%)	(6.0%)	1.7%	1.7%
2017	1.5%	-	(1.5%)	(2.9%)	(4.3%)	(5.6%)	1.6%	1.6%
Total	1.5%	-	(1.4%)	(2.8%)	(4.1%)	(5.4%)	1.5%	1.5%
	curr - 50 bp	curr val assumption	curr + 50bp	curr + 100bp	curr + 150bp	curr + 200bp	prior val assumption	prior fyr end assumption

EXHIBIT G

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

RSP	Alberta Non-G
AccountCode Desc	IBNR - Discoun d

M/S IBNR - in $000s

AccYear	Values Sum of Prior Month Actual Amount	Sum of Projected Change	Sum of Change Due to AvsP Variances	Sum of Change Due to Valuation Implementation	Sum of Total Change	Sum of % Total Change	Sum of Current Month Final Amount
2004	42	-	-	-	-	-	42
2005	(480)	10	(10)	-	-	-	(480)
2006	145	(2)	2	-	-	-	145
2007	70	(1)	-	-	(1)	(1.4%)	69
2008	735	(14)	13	-	(1)	(0.1%)	734
2009	322	(6)	(55)	-	(61)	(18.9%)	261
2010	841	(12)	(8)	-	(20)	(2.4%)	821
2011	788	(13)	313	-	300	38.1%	1,088
2012	2,724	(27)	(174)	-	(201)	(7.4%)	2,523
2013	4,980	(25)	(101)	-	(126)	(2.5%)	4,854
2014	11,598	(98)	(129)	-	(227)	(2.0%)	11,371
2015	14,740	(122)	(583)	-	(705)	(4.8%)	14,035
2016	18,614	(155)	805	-	650	3.5%	19,264
2017	4,350	2,279	1,114	-	3,393	78.0%	7,743
Grand Total	**59,469**	**1,814**	**1,187**	**-**	**3,001**	**5.0%**	**62,470**

EXHIBIT G

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

RSP	Alberta Non-G
AccountCode Desc	IBNR - Undisc ted

IBNR - in $000s

AccYear	Values Sum of Prior Month Actual Amount	Sum of Projected Change	Sum of Change Due to AvsP Variances	Sum of Change Due to Valuation Implementation	Sum of Total Change	Sum of % Total Change	Sum of Current Month Final Amount
2004	36	-	-	-	-	-	36
2005	(530)	11	(11)	-	-	-	(530)
2006	21	-	-	-	-	-	21
2007	(5)	-	(1)	-	(1)	20.0%	(6)
2008	623	(12)	11	-	(1)	(0.2%)	622
2009	111	(2)	(58)	-	(60)	(54.1%)	51
2010	582	(6)	(13)	-	(19)	(3.3%)	563
2011	256	(3)	371	-	368	143.8%	624
2012	1,753	(9)	(151)	-	(160)	(9.1%)	1,593
2013	3,698	-	(93)	-	(93)	(2.5%)	3,605
2014	8,896	(44)	(74)	-	(118)	(1.3%)	8,778
2015	11,554	(58)	(601)	-	(659)	(5.7%)	10,895
2016	14,513	(73)	824	-	751	5.2%	15,264
2017	2,833	1,908	1,067	-	2,975	105.0%	5,808
Grand Total	**44,341**	**1,712**	**1,271**	**-**	**2,983**	**6.7%**	**47,324**