

Nova Scotia RSP

Exhibit A

Summary of Valuation Selection Changes over Time

Facility Association Prior Accident Year Change in Estimated Ultimate Incurred Amounts RSP - Nova Scotia as at June 30, 2019

Amounts in \$000s

		Chang	e in Selected U	Itimates from	prior Sept 30th	1		Chang	e in Selected U	lt <u>imates fro</u> m I	Prior Quarter E	nd
	Sep-12	Sep-13	Sep-14	Sep-15	Sep-16	Sep-17	Sep-18	Dec-18	Mar-19	Jun-19	Sep-19	Dec-19
AY2008 & Prior	46	(59)	342	(29)	253	(167)	(4)	-	-	-	- !	-
AY2009	(872)	257	(108)	(84)	14	(13)	(43)	-	-	(0)	ļ	
AY2010	(867)	(377)	(104)	(113)	(187)	1	(103)	-	(4)	- !	ļ	
AY2011	(295)	390	609	617	496	(189)	(114)	-	(34)	30		
AY2012		1,543	1,099	292	1,033	221	(361)	(250)	(60)	(41)	İ	
AY2013			(28)	549	195	37	362	(176)	7	25	i I	
AY2014				(342)	(52)	(71)	(455)	(10)	215	103	ļ	
AY2015					(603)	(773)	331	(52)	(17)	253	ļ	
AY2016						(623)	711	(292)	96	(59)	ļ	
AY2017						i	303	(64)	55	(317)	j	
AY2018							I	-	867	(695)	I I	
Total	(1,989)	1,755	1,810	889	1,149	(1,577)	626	(845)	1,125	(702)	<u> </u>	-
		Change	in Selected Ul	timates as % B	eginning Unpa	id			Change fro	om Prior Quart	er End	
	Sep-12	Sep-13	Sep-14	Sep-15	6 46	1	i					
AV2000 0 D.'		3CP 13	2ch-T4	3eh-13	Sep-16	Sep-17	Sep-18	Dec-18	Mar-19	Jun-19	Sep-19	Dec-19
AY2008 & Prior	2.2%	(4.4%)	113.7%	(7.9%)	90.4%	(62.0%)	Sep-18 (8.9%)	Dec-18	Mar-19	Jun-19	Sep-19	Dec-19
AY2008 & Prior AY2009	2.2% (20.9%)	•			·			Dec-18	Mar-19 -	Jun-19 (0.1%)	Sep-19	Dec-19
		(4.4%)	113.7%	(7.9%)	90.4%	(62.0%)	(8.9%)	Dec-18 - -			Sep-19	Dec-19
AY2009	(20.9%)	(4.4%) 10.2%	113.7% (8.4%)	(7.9%) (30.2%)	90.4% 7.6%	(62.0%) (10.5%)	(8.9%) (38.6%)	-	-		Sep-19	Dec-19
AY2009 AY2010	(20.9%) (13.9%)	(4.4%) 10.2% (8.7%)	113.7% (8.4%) (4.5%)	(7.9%) (30.2%) (8.1%)	90.4% 7.6% (36.1%)	(62.0%) (10.5%) 0.4%	(8.9%) (38.6%) (75.1%)	-	(100.0%)	(0.1%)	Sep-19	Dec-19
AY2009 AY2010 AY2011	(20.9%) (13.9%)	(4.4%) 10.2% (8.7%) 10.1%	113.7% (8.4%) (4.5%) 19.3%	(7.9%) (30.2%) (8.1%) 23.4%	90.4% 7.6% (36.1%) 18.0%	(62.0%) (10.5%) 0.4% (8.4%)	(8.9%) (38.6%) (75.1%) (9.9%)	-	(100.0%) (3.6%)	(0.1%)	Sep-19	Dec-19
AY2009 AY2010 AY2011 AY2012	(20.9%) (13.9%)	(4.4%) 10.2% (8.7%) 10.1%	113.7% (8.4%) (4.5%) 19.3% 18.3%	(7.9%) (30.2%) (8.1%) 23.4% 5.4%	90.4% 7.6% (36.1%) 18.0% 23.3%	(62.0%) (10.5%) 0.4% (8.4%) 5.2%	(8.9%) (38.6%) (75.1%) (9.9%) (10.8%)	- - - (12.8%)	(100.0%) (3.6%) (5.3%)	(0.1%) 18.2% (4.7%)	Sep-19	Dec-19
AY2009 AY2010 AY2011 AY2012 AY2013	(20.9%) (13.9%)	(4.4%) 10.2% (8.7%) 10.1%	113.7% (8.4%) (4.5%) 19.3% 18.3%	(7.9%) (30.2%) (8.1%) 23.4% 5.4% 8.9%	90.4% 7.6% (36.1%) 18.0% 23.3% 3.3%	(62.0%) (10.5%) 0.4% (8.4%) 5.2% 0.7%	(8.9%) (38.6%) (75.1%) (9.9%) (10.8%) 8.8%	- - (12.8%) (6.1%)	(100.0%) (3.6%) (5.3%) 0.3%	(0.1%) 18.2% (4.7%) 1.0%	Sep-19	Dec-19
AY2009 AY2010 AY2011 AY2012 AY2013 AY2014	(20.9%) (13.9%)	(4.4%) 10.2% (8.7%) 10.1%	113.7% (8.4%) (4.5%) 19.3% 18.3%	(7.9%) (30.2%) (8.1%) 23.4% 5.4% 8.9%	90.4% 7.6% (36.1%) 18.0% 23.3% 3.3% (0.8%)	(62.0%) (10.5%) 0.4% (8.4%) 5.2% 0.7% (1.5%)	(8.9%) (38.6%) (75.1%) (9.9%) (10.8%) 8.8% (13.6%)	(12.8%) (6.1%) (0.6%)	(100.0%) (3.6%) (5.3%) 0.3% 13.2%	(0.1%) 18.2% (4.7%) 1.0% 5.6%	Sep-19	Dec-19
AY2009 AY2010 AY2011 AY2012 AY2013 AY2014 AY2015	(20.9%) (13.9%)	(4.4%) 10.2% (8.7%) 10.1%	113.7% (8.4%) (4.5%) 19.3% 18.3%	(7.9%) (30.2%) (8.1%) 23.4% 5.4% 8.9%	90.4% 7.6% (36.1%) 18.0% 23.3% 3.3% (0.8%)	(62.0%) (10.5%) 0.4% (8.4%) 5.2% 0.7% (1.5%) (10.8%)	(8.9%) (38.6%) (75.1%) (9.9%) (10.8%) 8.8% (13.6%) 5.9%	(12.8%) (6.1%) (0.6%) (1.0%)	(100.0%) (3.6%) (5.3%) 0.3% 13.2% (0.4%)	(0.1%) 18.2% (4.7%) 1.0% 5.6% 6.7%	Sep-19	Dec-19
AY2009 AY2010 AY2011 AY2012 AY2013 AY2014 AY2015 AY2016	(20.9%) (13.9%)	(4.4%) 10.2% (8.7%) 10.1%	113.7% (8.4%) (4.5%) 19.3% 18.3%	(7.9%) (30.2%) (8.1%) 23.4% 5.4% 8.9%	90.4% 7.6% (36.1%) 18.0% 23.3% 3.3% (0.8%)	(62.0%) (10.5%) 0.4% (8.4%) 5.2% 0.7% (1.5%) (10.8%)	(8.9%) (38.6%) (75.1%) (9.9%) (10.8%) 8.8% (13.6%) 5.9%	(12.8%) (6.1%) (0.6%) (1.0%) (4.2%)	(100.0%) (3.6%) (5.3%) 0.3% 13.2% (0.4%) 1.5%	(0.1%) 18.2% (4.7%) 1.0% 5.6% 6.7% (1.1%)	Sep-19	Dec-19

Note:

- 1."Change in Selected Ultimates from prior Sept 30th" is calculated as the fiscal year change in nominal selected ultimate losses from the prior September 30th valuation (for the last accident year, this fiscal year change is estimated as the change in the accident year selected nominal loss ratio against the accident year earned premium as at the current valuation date)
- 2."Change in Selected Ultimates as % of Beginning Unpaid" is calculated as the Change in Selected Ultimates from Prior valuation date (for September 30th valuations for the last accident year, this change is estimated as 75% of the full year change in selected ultimates) over the selected nominal Unpaid at the prior valuation date



Nova Scotia RSP

Exhibit B

Exhibit B.1 (total government lines)

B.1.1	Summary of Nominal Results
B.1.2	Loss Ratios over Time
B.1.3.1	Comparison of Government Line Ultimates
B.1.3.2	Selected Losses by Method
B.1.3.3	Comparison of IBNR by Method
B.1.4.1	a priori LRs



Nova Scotia RSP

Exhibit B

Exhibit B.2 (TPL govt line)

B.2.1	Summary of Nominal Results
B.2.2	Loss Ratios over Time
B.2.3	a priori LRs
B.2.4.1	Selected Losses by Method
B.2.4.2	Comparison of IBNR by Method
B.2.4.4-1	Selected Losses by Method at Coverage Leve
B.2.4.4-2	Comparison of IBNR by Method at Coverage Level

Exhibit B.3 (Accident Benefits govt line – same as above)

Exhibit B.4 (Other govt line – same as above)

Facility Association Valuation Results
Amounts in: \$1,000s as at June 30, 2019

Coverage: Total RSP: Nova Scotia

Life to Date													
Accident Year	Earned	Paid Indemnity &	Allowed Claims	Case Res		Recorded Indem	nity & Allowed	Selecte	4 IDNID	Ultimate Indem	nity & Allowed	Unpaid Indemr	ity & Allowed
Accident Year	Premium	Exper	nse	Case Res	serves	Claims E	xpense	Selected	I IDINK	Claims E	xpense	Claims E	xpense
	\$000s	\$000s	% EP	\$000s	% EP	\$000s	% EP	\$000s	% EP	\$000s	% EP	\$000s	% EP
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
i	database	database	= [3]/[2]	= [7]-[3]	= [5]/[2]	database	= [7]/[2]	database	= [9]/[2]	= [7]+[9]	= [11]/[2]	= [5]+[9]	= [13]/[2]
2014 & prior	93,664	71,304	76.1%	5,076	5.4%	76,380	81.5%	2	-	76,382	81.5%	5,078	5.4%
2015	14,026	8,342	59.5%	3,474	24.8%	11,816	84.2%	146	1.0%	11,962	85.3%	3,620	25.8%
2016	14,844	8,684	58.5%	4,118	27.7%	12,802	86.2%	677	4.6%	13,479	90.8%	4,795	32.3%
2017	18,965	8,578	45.2%	5,552	29.3%	14,130	74.5%	3,232	17.0%	17,362	91.5%	8,784	46.3%
2018	27,590	11,137	40.4%	6,575	23.8%	17,712	64.2%	8,310	30.1%	26,022	94.3%	14,885	54.0%
2019	14,685	4,519	30.8%	3,070	20.9%	7,589	51.7%	5,680	38.7%	13,269	90.4%	8,750	59.6%
TOTAL	183,774	112,564	61.3%	27,865	15.2%	140,429	76.4%	18,047	9.8%	158,476	86.2%	45,912	25.0%
			_									_	
2018 & prior	169,089	108,045	63.9%	24,795	14.7%	132,840	78.6%	12,367	7.3%	145,207	85.9%	37,162	22.0%

Activity During	Quarter vs EP												
Accident Year	Earned Premium (LTD)	Change in Paid Indemnity & Allowed Claims Expense		Change in Cas	se Reserves	Change in Record	' 1	Change in Sel	ected IBNR	Change in Ultima Allowed Clair	,	Change in Unpai Allowed Clair	,
	\$000s	\$000s	% EP	\$000s	% EP	\$000s	% EP	\$000s	% EP	\$000s	% EP	\$000s	% EP
[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]
	database	database	=[17]/[16]	database	=[19]/[16]	database	=[21]/[16]	database	=[23]/[16]	database	=[25]/[16]	database	=[27]/[16]
2014 & prior	93,664	426	0.5%	(310)	(0.3%)	116	0.1%	-	-	116	0.1%	(310)	(0.3%)
2015	14,026	423	3.0%	(94)	(0.7%)	329	2.3%	(76)	(0.5%)	253	1.8%	(170)	(1.2%)
2016	14,844	659	4.4%	(386)	(2.6%)	273	1.8%	(332)	(2.2%)	(59)	(0.4%)	(718)	(4.8%)
2017	18,965	627	3.3%	(594)	(3.1%)	33	0.2%	(350)	(1.8%)	(317)	(1.7%)	(944)	(5.0%)
2018	27,590	400	1.4%	(443)	(1.6%)	(43)	(0.2%)	(651)	(2.4%)	(694)	(2.5%)	(1,094)	(4.0%)
TOTAL	169,089	2,535	1.5%	(1,827)	(1.1%)	708	0.4%	(1,409)	(0.8%)	(701)	(0.4%)	(3,236)	(1.9%)

Emergence Dur	ing Quarter							
Accident Year	Beginning IBNR	Beginning Unpaid	Ü	d Indemnity & ims Expense		ded Indemnity & ims Expense	Change in Ultima	,
!	\$000s	\$000s	\$000s	% Beg Unpaid	\$000s	% Beg IBNR	\$000s	% Beg Unpaid
[29]	[30]	[31]	[32]	[33]	[34]	[35]	[36]	[37]
	database	database	[17]	=[32]/[31]	[21]	=[34]/[30]	[25]	=[36]/[31]
2014 & prior	2	5,388	426	7.9%	116	5,800.0%	116	2.2%
2015	222	3,790	423	11.2%	329	148.2%	253	6.7%
2016	1,009	5,513	659	12.0%	273	27.1%	(59)	(1.1%)
2017	3,582	9,728	627	6.4%	33	0.9%	(317)	(3.3%)
2018	8,961	15,979	400	2.5%	(43)	(0.5%)	(694)	(4.3%)
TOTAL	13,776	40,398	2,535	6.3%	708	5.1%	(701)	(1.7%)

Facility Association Amounts in: \$1,000s Loss Ratios Over Time as at June 30, 2019

Coverage: Total RSP: Nova Scotia

Accident	Earned Premium	Paid Claims Amt*	Case Reserve	Recorded Claims Amt*	Selected IBNR	Ultimate Claims Amt*	Selected Ultimate LR		with prior Mar 2019	Sel Ult LR @ compared v Sel Ult LR @	with prior Jun 2018 Claims Amt*				
Year	@ Jun 2019	@ Jun 2019	@ Jun 2019	@ Jun 2019	@ Jun 2019	@ Jun 2019	@ Jun 2019	@ Mar 2019	@ Dec 2018	@ Sep 2018	@ Jun 2018	Ultimate LR	Claims Amt*	Ultimate LR	@ curr EP
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]
	database	database	= [5]-[3]	database	database	= [5]+[6]	= [7]/[2]	database	database	database	database	= [8]-[9]		= [8]-[12]	= [2]*[15]
2007	2,057	1,109	-	1,109	-	1,109	53.9%	53.9%	53.9%	53.9%		-	-	-	-
2008	10,620	7,252	-	7,252	-	7,252	68.3%	68.3%	68.3%	68.3%	68.3%	-	-	-	-
2009	14,065	8,900	68	8,968	-	8,968	63.8%	63.8%	63.8%	63.8%	63.8%	-	(1)	-	-
2010	14,454	10,605	-	10,605	-	10,605	73.4%	73.4%	73.4%	73.4%	74.0%	-	-	(0.6%)	(87)
2011	12,312	10,948	153	11,101	-	11,101	90.2%	89.9%	90.2%	90.2%	89.5%	0.3%	30	0.7%	86
2012	13,197	12,707	824	13,531	-	13,531	102.5%	102.8%	103.3%	105.2%	107.6%	(0.3%)	(41)	(5.1%)	(673)
2013	13,787	10,102	2,419	12,521	-	12,521	90.8%	90.6%	90.6%	91.9%	90.7%	0.2%	25	0.1%	14
2014	13,172	9,681	1,612	11,293	2	11,295	85.8%	85.0%	83.3%	83.4%	84.7%	0.8%	103	1.1%	145
2015	14,026	8,342	3,474	11,816	146	11,962	85.3%	83.5%	83.6%	84.0%	81.7%	1.8%	253	3.6%	505
2016	14,844	8,684	4,118	12,802	677	13,479	90.8%	91.2%	90.5%	92.5%	91.6%	(0.4%)	(59)	(0.8%)	(119)
2017	18,965	8,578	5,552	14,130	3,232	17,362	91.5%	93.0%	92.7%	93.0%	94.9%	(1.5%)	(317)	(3.4%)	(645)
2018	27,590	11,137	6,575	17,712	8,310	26,022	94.3%	96.3%	93.0%	90.1%	85.6%	(2.0%)	(694)	-	-
2019	14,685	4,519	3,070	7,589	5,680	13,269	90.4%	92.6%	-	-	-	-	-	-	-
TOTAL	183,774	112,564	27,865	140,429	18,047	158,476	86.2%	86.4%	85.5%	85.3%	84.8%		(701)		(774)
2018 & prior	169,089	108,045	24,795	132,840	12,367	145,207	85.9%	86.2%	85.5%	85.3%	84.8%		(701)		(774)

^{*} Claims Amt = indemnity & allowed claims expense (where latter is allowed expense over and above the claims expense included in the expense allowance for member companies)

^{**} Accident year loss ratios are as at the valuation date, for the current accident year, these loss ratios are based on partial year exposure, as such, larger variances may be expected

Comparison of Selected Ultimate Incurred Claims Amounts by Coverage

as at June 30, 2019

Amounts in: \$1,000s RSP: Nova Scotia

		Prior A	nalysis (Mar 2019)			Current	Analysis (Jun 2019)			Chang	e from Prior Analysis	
Accident Year	Third Party Liability	Accident Benefits	Other Coverages	Total	Third Party Liability	Accident Benefits	Other Coverages	Total	Third Party Liability	Accident Benefits	Other Coverages	Total
2007	589	51	469	1,109	589	51	469	1,109	-	-	-	-
2008	4,290	545	2,416	7,252	4,290	545	2,416	7,252	-	-	-	-
2009	5,514	558	2,897	8,969	5,513	558	2,897	8,968	(1)	-	-	(1)
2010	7,292	692	2,621	10,605	7,292	692	2,621	10,605	-	-	-	-
2011	7,978	604	2,489	11,071	7,978	633	2,489	11,101	-	29	9 -	30
2012	10,003	1,147	2,421	13,572	9,961	1,148	2,421	13,531	(42)	1	1 -	(41)
2013	8,887	1,033	2,576	12,496	8,927	1,017	2,576	12,521	40	(16	5) -	25
2014	8,146	694	2,352	11,192	8,249	695	2,351	11,295	103	1	1 (1)	103
2015	7,890	1,355	2,464	11,709	8,127	1,373	2,461	11,962	237	18	3 (3)	253
2016	10,212	911	2,415	13,538	10,199	874	2,406	13,479	(13)	(37	7) (9)	(59)
2017	12,438	1,717	3,525	17,679	12,165	1,683	3,513	17,362	(273)	(34	4) (12)	(317)
2018	18,507	2,077	6,133	26,716	18,084	1,855	6,083	26,022	(423)	(222	2) (50)	(694)
2019	4,524	640	1,598	6,762	8,909	1,090	3,269	13,269	4,385	450	1,671	6,507
Total	106,270	12,024	34,376	152,670	110,283	12,214	35,972	158,476	4,013	190	1,596	5,806
2018 & Prior	101,746	11,384	32,778	145,908	101,374	11,124	32,703	145,207	(372)	(260	0) (75)	(701)

Estimated and Selected Ultimate Losses by Method

as at June 30, 2019

Coverage: Total RSP: Nova Scotia Amounts in: \$1,000s

		Actual Ex	perience										Ulti	mate Loss E	stimates									
Accident Year	Earned Premium	Paid Claims to Date	Case Reserves	Reported to Date	ELR Method*	Link Ratio Method	Implied BF ELR Method weight*	Implied BF Link Ratio Method weight*	BF Method*	ELR Method weight	Link Ratio Method weight	ELR & LR Wtd Method		User Defined	d User Defined 2	ELR Method Ult LR*	Link Ratio Method Ult LR	BF Method Ult LR*	ELR & LR Wtd Method Ult LR	Incurred (Zero IBNR) Ult LR	User Defined 1 Ult LR	User Defined 2 Ult LR	Selected Ultimate Claims Amount	Selected Ultimate Loss Ratio
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
																=([5]/[1])	=([6]/[1])	=([9]/[1])	=([12]/[1])	=([13]/[1])	=([14]/[1])	=([15]/[1])		=([23]/[1])
2007	2,057	1,109	-	1,109		1,109						1,109	1,109				53.9%		53.9%	53.9%			1,109	53.9%
2008	10,620	7,252	-	7,252		7,252						7,252	7,252				68.3%		68.3%	68.3%			7,252	68.3%
2009	14,065	8,900	68	8,968		8,967						8,967	8,968				63.8%		63.8%	63.8%			8,968	63.8%
2010	14,454	10,605	-	10,605	8,302	10,605	-	100.0%	10,605			10,605	10,605			57.4%	73.4%	73.4%	73.4%	73.4%			10,605	73.4%
2011	12,312	10,948	153	11,101	7,624	11,102	-	100.0%	11,102			11,102	11,101			61.9%	90.2%	90.2%	90.2%	90.2%			11,101	90.2%
2012	13,197	12,707	823	13,531	9,179	13,531	-	100.0%	13,531			13,531	13,531			69.6%	102.5%	102.5%	102.5%	102.5%			13,531	102.5%
2013	13,787	10,102	2,419	12,521	10,251	12,520	-	100.0%	12,520			12,520	12,521			74.4%	90.8%	90.8%	90.8%	90.8%			12,521	90.8%
2014	13,172	9,681	1,612	11,293	10,464	11,295	(0.2%)	100.2%	11,297			11,295	11,293			79.4%	85.8%	85.8%	85.8%	85.7%			11,295	85.8%
2015	14,026	8,342	3,473	11,816	11,863	11,972	30.5%	69.5%	11,939			11,879	11,816			84.6%	85.4%	85.1%	84.7%	84.2%			11,962	85.3%
2016	14,844	8,684	4,118	12,802	13,042	13,615	25.0%	75.0%	13,472			13,352	12,802			87.9%	91.7%	90.8%	89.9%	86.2%			13,479	90.8%
2017	18,965	8,578	5,552	14,130	17,684	16,192	23.8%	76.2%	16,547			17,181	14,130			93.2%	85.4%	87.3%	90.6%	74.5%			17,362	91.5%
2018	27,590	11,137	6,574	17,712	26,059	21,353	39.2%	60.8%	23,198			25,259	17,712			94.5%	77.4%	84.1%	91.6%	64.2%			26,022	94.3%
2019	14,685	4,519	3,070	7,589	12,731	8,306	54.6%	45.4%	10,721			-	7,589			86.7%	56.6%	73.0%		51.7%			13,269	90.4%
Total	183,773	112,564	27,864	140,428	127,201	147,818			134,931			144,052	140,428										158,475	

^{*}Earned Premium prior to data modernization (2009 / 2) was not allocated on a coverage level

^{**}For 'off-half' valuation quarters (Mar and Sep), the current accident year (CAY) by method Ultimate Loss estimates ([5] to [22]) are aggregated from a coverage level

Comparison of Estimated Ultimate Losses by Method

as at June 30, 2019

Coverage: Total RSP: Nova Scotia Amounts in: \$1,000s

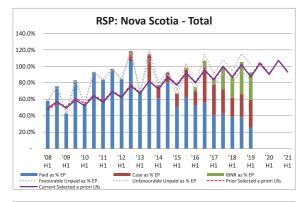
					Curren	t Valuation R	esults (as at J	lun 2019)						Prior \	/aluation Results (as at Mar 2	2019)			Cha	inge from Pr	ior Valuation	1
Accident Year	ELR Method*	Link Ratio Method	BF Method*	ELR & LR Wtd Method	Incurred (Zero IBNR)	User Defined	User Defined 2	Selected IBNR Method**	Selected IBNR	Selected Ultimate	Selected Ultimate LR	ELR Method*	LR Ratio Method	BF Method*	Selected IBNR Method**	Selected IBNR	Selected Ultimate	Selected Ultimate LR	Incurred to Date	Selected IBNR	Selected Ultimate	Selected Ultimate LR
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
																				=([9]-[16])	=([10]-[17])	=([11]-[18])
2007		1,109		1,109	1,109			N/A	-	1,109	53.9%		1,109		N/A	-	1,109	53.9%	-	-	-	-
2008		7,252		7,252	7,252			N/A	-	7,252	68.3%		7,252		N/A	-	7,252	68.3%	-	-	-	-
2009		8,967		8,967	8,968			N/A	-	8,968	63.8%		8,968		N/A	-	8,969	63.8%	-	-	-	-
2010	8,302	10,605	10,605	10,605	10,605			N/A	-	10,605	73.4%	8,649	10,605	10,605	N/A	-	10,605	73.4%	-	-	-	-
2011	7,624	11,102	11,102	11,102	11,101			N/A	-	11,101	90.2%	7,892	11,071	11,071	N/A	-	11,071	89.9%	30	-	30	0.3%
2012	9,179	13,531	13,531	13,531	13,531			N/A	-	13,531	102.5%	9,346	13,572	13,572	N/A	-	13,572	102.8%	(41)	-	(41)	(0.3%)
2013	10,251	12,520	12,520	12,520	12,521			N/A	-	12,521	90.8%	10,310	12,499	12,498	N/A	-	12,496	90.6%	25	-	25	0.2%
2014	10,464	11,295	11,297	11,295	11,293			N/A	2	11,295	85.8%	10,629	11,192	11,194	N/A	2	11,192	85.0%	103	-	103	0.8%
2015	11,863	11,972	11,939	11,879	11,816			N/A	146	11,962	85.3%	11,948	11,728	11,708	N/A	222	11,709	83.5%	329	(76)	253	1.8%
2016	13,042	13,615	13,472	13,352	12,802			N/A	677	13,479	90.8%	13,065	13,615	13,438	N/A	1,009	13,538	91.2%	273	(332)	(59)	(0.4%)
2017	17,684	16.192	16.547	17.181	14,130			N/A	3.232	17.362	91.5%	17,591	16,454	16,787	N/A	3,582	17.679	93.0%	33	(350)	(317)	
2018	26,059	21,353	23,198	25,259	17,712			N/A	8,310	26,022	94.3%	25,924	21,491	23,350		8,961	26,716	96.3%	(44)	(651)	(695)	
2019	12,731	8,306	10,721		7,589			N/A	5,680	13,269	90.4%	13,270	9,149	12,353	'	2,442	6,762	92.5%	3,269	3,238	6,507	(2.1%)
Total	127,201	147,818	134,931	144,052	140,428			- oye	18,047	158,475	23.470	128,622	148,704	136,576		16,218	152,670	52.570	3,977	1,829	5,806	(2.270)
,															*							
2018 & Prior	114,469	139,512	124,210	144,052	132,839				12,367	145,206		115,353	139,555	124,223		13,776	145,908		708	(1,409)	(701)	

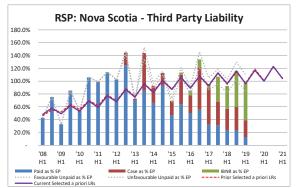
 ^{2018 &}amp; Prior
 114,469
 139,512
 124,210
 144,052
 132,839

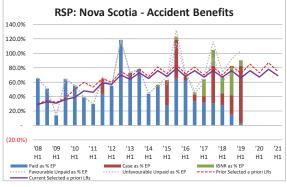
 *Earned Premium prior to data modernization (2009 / 2) was not allocated on a coverage level

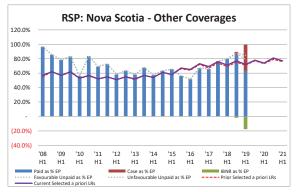
^{**}IBNR selected on a coverage level and aggregated to a Government Line (or Total) level

		CUR	RENT			PRI	OR			CHAI	NGE	
Accident	Third Party	Accident	Other	Total	Third Party	Accident	Other	Total	Third Party	Accident	Other	Total
Period	Liability	Benefits	Coverages	TOTAL	Liability	Benefits	Coverages	TOTAL	Liability	Benefits	Coverages	TOTAL
2014 / 1	82.0%	65.0%	54.0%	72.0%	84.0%	68.0%	54.0%	73.0%	(2.0%)	(3.0%)	-	(1.0%)
2014 / 2	101.0%	76.0%	61.0%	87.0%	102.0%	81.0%	61.0%	88.0%	(1.0%)	(5.0%)	-	(1.0%)
2015 / 1	87.0%	68.0%	58.0%	77.0%	88.0%	72.0%	58.0%	78.0%	(1.0%)	(4.0%)	-	(1.0%)
2015 / 2	106.0%	79.0%	67.0%	92.0%	106.0%	84.0%	66.0%	92.0%	-	(5.0%)	1.0%	-
2016 / 1	89.0%	68.0%	65.0%	80.0%	90.0%	72.0%	64.0%	81.0%	(1.0%)	(4.0%)	1.0%	(1.0%)
2016 / 2	108.0%	76.0%	73.0%	95.0%	107.0%	81.0%	72.0%	95.0%	1.0%	(5.0%)	1.0%	-
2017 / 1	93.0%	67.0%	69.0%	84.0%	92.0%	70.0%	67.0%	83.0%	1.0%	(3.0%)	2.0%	1.0%
2017 / 2	113.0%	76.0%	76.0%	100.0%	112.0%	81.0%	74.0%	99.0%	1.0%	(5.0%)	2.0%	1.0%
2018 / 1	96.0%	67.0%	71.0%	87.0%	95.0%	70.0%	69.0%	86.0%	1.0%	(3.0%)	2.0%	1.0%
2018 / 2	116.0%	76.0%	77.0%	102.0%	114.0%	83.0%	75.0%	101.0%	2.0%	(7.0%)	2.0%	1.0%
2019 / 1	96.0%	66.0%	72.0%	87.0%	97.0%	72.0%	71.0%	88.0%	(1.0%)	(6.0%)	1.0%	(1.0%)
2019 / 2	117.0%	76.0%	78.0%	103.0%	119.0%	85.0%	77.0%	105.0%	(2.0%)	(9.0%)	1.0%	(2.0%)
2020 / 1	100.0%	67.0%	74.0%	90.0%	101.0%	73.0%	73.0%	91.0%	(1.0%)	(6.0%)	1.0%	(1.0%)
2020 / 2	123.0%	78.0%	81.0%	107.0%	122.0%	87.0%	79.0%	107.0%	1.0%	(9.0%)	2.0%	-
2021 / 1	104.0%	69.0%	77.0%	93.0%	105.0%	75.0%	76.0%	94.0%	(1.0%)	(6.0%)	1.0%	(1.0%)

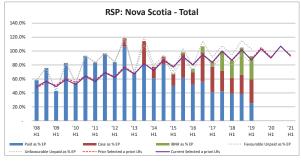


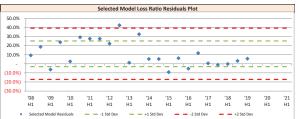






Accident Period	Current Selected	Prior Selected	Change
2008 / 1	49.0%	47.0%	2.0%
2008 / 2	57.0%	55.0%	2.0%
2009 / 1	49.0%	51.0%	(2.0%)
2009 / 2	59.0%	61.0%	(2.0%)
2010 / 1	52.0%	55.0%	(3.0%)
2010 / 2	64.0%	65.0%	(1.0%)
2011/1	56.0%	58.0%	(2.0%)
2011/2	69.0%	70.0%	(1.0%)
2012 / 1	62.0%	63.0%	(1.0%)
2012 / 2	76.0%	78.0%	(2.0%)
2013 / 1	67.0%	68.0%	(1.0%)
2013 / 2	82.0%	82.0%	
2014 / 1	72.0%	73.0%	(1.0%)
2014/2	87.0%	88.0%	(1.0%)
2015 / 1	77.0%	78.0%	(1.0%)
2015 / 2	92.0%	92.0%	
2016 / 1	80.0%	81.0%	(1.0%)
2016/2	95.0%	95.0%	-
2017 / 1	84.0%	83.0%	1.0%
2017 / 2	100.0%	99.0%	1.0%
2018 / 1	87.0%	86.0%	1.0%
2018 / 2	102.0%	101.0%	1.0%
2019 / 1	87.0%	88.0%	(1.0%)
2019 / 2	103.0%	105.0%	(2.0%)
2020 / 1	90.0%	91.0%	(1.0%)
2020 / 2	107.0%	107.0%	-
2021/1	93.0%	94.0%	(1.0%)





		Mar 31,	2019 valuation	result			Adjust EP to 20	19 / 1 rate leve	el .	Adjust Ultin	nate Claims Am	ount to 2019 /	1 clms level		
Accident Period	Actual Earned Premium	Paid Claims Amount	Case Reserves	Selected Ultimate Claims Amount*	Selected Ultimate Loss Ratio	Rate Change	Drift (RG, class, etc.)	Other	EP @ 2019 / 1 rate level	Loss Cost Trend Factor	Reform Adj Factor	Other Factor	Ult. Clms Amt @ 2019 / 1 clms level	On-Level to 2019 / 1 Loss Ratios	Weights
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]
	val data	val data	val data	val data	=[4]/[1]	industry avg EP relativity	assumption	assumption	=[1]*[6]*[7]*[8]	trend analysis	assumption	assumption	=[4]*[10]* [11]*[12]	=[13]/[9]	selected
2008 / 1	7,492	2,628	-	2,628	35.1%	1.0975	1.0000	1.0000	8,224	1.8485	1.0000	1.0000	4,858	59.1%	-
2008 / 2	10,112	4,624		4,624	45.7%	1.1189	1.0000	1.0000	11,315	1.7097	1.0000	1.0000	7,906	69.9%	
2009 / 1	11,011	2,849	-	2,849	25.9%	1.1266	1.0000	1.0000	12,407	1.7480	1.0000	1.0000	4,980	40.1%	-
2009 / 2	12,184	6,051	68	6,120	50.2%	1.1281	1.0000	1.0000	13,745	1.6674	1.0000	1.0000	10,203	74.2%	
2010 / 1	7,413	4,049	-	4,049	54.6%	1.1120	1.0000	1.0000	8,244	1.8328	1.0000	1.0000	7,422	90.0%	-
2010/2	7,041	6,556		6,556	93.1%	1.1222	1.0000	1.0000	7,901	1.5641	1.0000	1.0000	10,253	129.8%	
2011/1	6,345	5,267	35	5,302	83.6%	1.1300	1.0000	1.0000	7,171	1.7808	1.0000	1.0000	9,443	131.7%	0.1%
2011/2	5,968	5,641	128	5,769	96.7%	1.1403	1.0000	1.0000	6,806	1.4588	1.0000	1.0000	8,415	123.6%	0.1%
2012 / 1	5,957	5,005	4	5,009	84.1%	1.1553	1.0000	1.0000	6,882	1.6649	1.0000	1.0000	8,340	121.2%	0.1%
2012 / 2	7,239	7,693	870	8,563	118.3%	1.1874	1.0000	1.0000	8,595	1.3719	1.0000	1.0000	11,748	136.7%	0.1%
2013 / 1	7,110	4,748	106	4,854	68.3%	1.1970	1.0000	1.0000	8,510	1.5599	1.0000	1.0000	7,572	89.0%	0.1%
2013 / 2	6,677	5,294	2,348	7,642	114.4%	1.1953	1.0000	1.0000	7,981	1.2707	1.0000	1.0000	9,711	121.7%	0.1%
2014 / 1	6,415	3,924	1,029	4,954	77.2%	1.1871	1.0000	1.0000	7,616	1.4502	1.0000	1.0000	7,184	94.3%	1.9%
2014/2	6,756	5,438	798	6,238	92.3%	1.1913	1.0000	1.0000	8,048	1.1923	1.0000	1.0000	7,438	92.4%	1.9%
2015 / 1	6,804	3,440	1,140	4,611	67.8%	1.1894	1.0000	1.0000	8,094	1.3364	1.0000	1.0000	6,162	76.1%	5.7%
2015 / 2	7,223	4,480	2,428	7,098	98.3%	1.1792	1.0000	1.0000	8,518	1.1027	1.0000	1.0000	7,827	91.9%	5.7%
2016 / 1	7,234	3,753	1,267	5,411	74.8%	1.1623	1.0000	1.0000	8,408	1.2493	1.0000	1.0000	6,760	80.4%	14.1%
2016 / 2	7,611	4,272	3,237	8,127	106.8%	1.1342	1.0000	1.0000	8,632	1.0196	1.0000	1.0000	8,288	96.0%	14.0%
2017 / 1	7,940	3,258	2,904	6,717	84.6%	1.1158	1.0000	1.0000	8,860	1.1631	1.0000	1.0000	7,812	88.2%	14.1%
2017/2	11,074	4,693	3,242	10,963	99.0%	1.0987	1.0000	1.0000	12,167	0.9601	1.0000	1.0000	10,525	86.5%	14.1%
2018 / 1	13,379	5,186	3,065	11,607	86.8%	1.0766	1.0000	1.0000	14,402	1.0773	1.0000	1.0000	12,505	86.8%	14.2%
2018 / 2	14,373	5,551	3,953	15,109	105.1%	1.0438	1.0000	1.0000	15,004	0.8923	1.0000	1.0000	13,482	89.9%	14.2%
Total	183,358	104,400	26,622	144,799	79.0%	1.1318	1.0000	1.0000	207,530	1.3041	1.0000	1.0000	188,834	91.0%	100.2%
			*indemnity & a	llowed claims	expense	2018-2 AIX				on industry 20	18-2 AIX data		veighted average:	88.0%	
			from FA Valuat	ion Summary						derived from 2	019 / 1 on-lev	els	selected	87.0%	88.0%
														current	prior

Premium adjustment factors [6]-[8], Claims adjustment factors [10]-[12], and selected experience period weights [15] are selected at the coverage level, implied aggregate factors are presented above

Facility Association Valuation Results
Amounts in: \$1,000s as at June 30, 2019

Coverage: Third Party Liability
RSP: Nova Scotia

A :1 .W	Earned	Paid Indemnity &	Allowed Claims	6 5		Recorded Indem	nity & Allowed	6.1.1	LIBNID	Ultimate Indemi	nity & Allowed	Unpaid Indemn	nity & Allowed
Accident Year	Premium	Expe	nse	Case Res	serves	Claims Ex	kpense	Selected	IBNK	Claims E	xpense	Claims E	xpense
	\$000s	\$000s	% EP	\$000s	% EP	\$000s	% EP	\$000s	% EP	\$000s	% EP	\$000s	% EP
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
i	database	database	= [3]/[2]	= [7]-[3]	= [5]/[2]	database	= [7]/[2]	database	= [9]/[2]	= [7]+[9]	= [11]/[2]	= [5]+[9]	= [13]/[2]
2014 & prior	58,384	47,887	82.0%	4,912	8.4%	52,799	90.4%	-	-	52,799	90.4%	4,912	8.4%
2015	8,534	5,188	60.8%	2,845	33.3%	8,033	94.1%	94	1.1%	8,127	95.2%	2,939	34.4%
2016	9,233	5,522	59.8%	4,062	44.0%	9,584	103.8%	615	6.7%	10,199	110.5%	4,677	50.7%
2017	12,141	4,467	36.8%	4,811	39.6%	9,278	76.4%	2,887	23.8%	12,165	100.2%	7,698	63.4%
2018	17,589	4,410	25.1%	6,089	34.6%	10,499	59.7%	7,585	43.1%	18,084	102.8%	13,674	77.7%
2019	9,337	1,664	17.8%	1,529	16.4%	3,193	34.2%	5,716	61.2%	8,909	95.4%	7,245	77.6%
TOTAL	115,218	69,138	60.0%	24,248	21.0%	93,386	81.1%	16,897	14.7%	110,283	95.7%	41,145	35.7%
					•			•				•	
2018 & prior	105,881	67,474	63.7%	22,719	21.5%	90,193	85.2%	11,181	10.6%	101,374	95.7%	33,900	32.0%

Activity During (Quarter vs EP												
Accident Year	Earned Premium (LTD)	Change in Paid Allowed Clair	, i	Change in Cas	se Reserves	Change in Record	, ,	Change in Sel	ected IBNR	Change in Ultima Allowed Clair	,	Change in Unpai Allowed Clair	,
	\$000s \$000s % EP		% EP	\$000s	% EP	\$000s	% EP	\$000s	% EP	\$000s	% EP	\$000s	% EP
[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]
	database	database	=[17]/[16]	database	=[19]/[16]	database	=[21]/[16]	database	=[23]/[16]	database	=[25]/[16]	database	=[27]/[16]
2014 & prior	58,384	421	0.7%	(321)	(0.5%)	100	0.2%	-	-	100	0.2%	(321)	(0.5%)
2015	8,534	409	4.8%	(81)	(0.9%)	328	3.8%	(91)	(1.1%)	237	2.8%	(172)	(2.0%)
2016	9,233	630	6.8%	(337)	(3.6%)	293	3.2%	(306)	(3.3%)	(13)	(0.1%)	(643)	(7.0%)
2017	12,141	586	4.8%	(635)	(5.2%)	(49)	(0.4%)	(224)	(1.8%)	(273)	(2.2%)	(859)	(7.1%)
2018	17,589	278	1.6%	(134)	(0.8%)	144	0.8%	(567)	(3.2%)	(423)	(2.4%)	(701)	(4.0%)
TOTAL	105,881	2,324	2.2%	(1,508)	(1.4%)	816	0.8%	(1,188)	(1.1%)	(372)	(0.4%)	(2,696)	(2.5%)

Emergence Dur	ing Quarter							
Accident Year	Beginning IBNR	Beginning Unpaid	Ü	d Indemnity & ims Expense		ded Indemnity & ims Expense	Change in Ultima	,
	\$000s	\$000s	\$000s	% Beg Unpaid	\$000s	% Beg IBNR	\$000s	% Beg Unpaid
[29]	[30]	[31]	[32]	[33]	[34]	[35]	[36]	[37]
	database	database	[17]	=[32]/[31]	[21]	=[34]/[30]	[25]	=[36]/[31]
2014 & prior	-	5,233	421	8.0%	100	100.0%	100	1.9%
2015	185	3,111	409	13.1%	328	177.3%	237	7.6%
2016	921	5,320	630	11.8%	293	31.8%	(13)	(0.2%)
2017	3,111	8,557	586	6.8%	(49)	(1.6%)	(273)	(3.2%)
2018	2018 8,152 14,375		278	1.9%	144	1.8%	(423)	(2.9%)
TOTAL	12,369	36,596	2,324	6.4%	816	6.6%	(372)	(1.0%)

Sel Ult LR @ Jun 2019

Sel Ult LR @ Jun 2019

Facility Association Loss Ratios Over Time
Amounts in: \$1,000s as at June 30, 2019

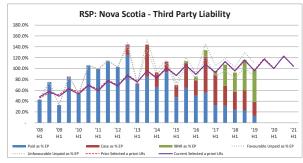
Coverage: Third Party Liability
RSP: Nova Scotia

compared with prior compared with prior Earned Paid Case Selected Ultimate Selected Selected Selected Selected Selected Sel Ult LR @ Mar 2019 Sel Ult LR @ Jun 2018 Recorded Premium Claims Amt* Claims Amt* IBNR Claims Amt* Ultimate LR Ultimate LR Ultimate LR Ultimate LR **Ultimate LR** Claims Amt* Accident Reserve @ Jun 2019 @ Mar 2019 @ Dec 2018 @ Sep 2018 @ Jun 2018 Ultimate LR Claims Amt* Ultimate LR @ curr EP Year [1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] database database = [5]-[3] database database = [5]+[6] = [7]/[2] database database database database = [8]-[9] = [8]-[12] = [2]*[15] 2007 1,374 589 589 589 42.9% 42.9% 42.9% 42.9% I 42.9% 2008 6,983 4,290 4,290 4,290 61.4% 61.4% 61.4% 61.4% 61.4% 2009 9,131 5,445 5,513 5,513 60.4% 60.4% 60.4% 60.4% i 60.4% 68 (1.0%) 2010 9,222 7,292 7,292 7,292 79.1% 79.1% 79.1% 79.1% 80.1% (92) 2011 7,506 7,978 7,978 7,978 106.7% 105.5% 0.8% 60 106.3% 106.3% 106.7% 2012 7,943 127.7% 131.7% (0.5%)(42) (500) 9,138 823 9,961 9,961 125.4% 125.9% 126.7% (6.3%)8,323 106.8% 108.3% 0.5% 40 92 2013 6,509 2,418 8,927 8,927 107.3% 106.8% 106.2% 1.1% 2014 7,902 6,646 1,603 8,249 8,249 104.4% 103.1% 100.4% 100.2% 102.1% 103 2.3% 182 1.3% 2015 8,534 5,188 2,845 8,033 94 8,127 95.2% 92.5% 92.5% 92.9% 87.4% 2.7% 237 7.8% 666 2016 9,233 9,584 615 110.6% 108.4% 107.1% 3.4% 5,522 4,062 10,199 110.5% 111.8% (0.1%)(13)314 2017 12,141 4,467 4,811 9,278 2,887 12,165 100.2% 102.2% 101.2% 101.9% 102.8% (2.0%)(273) (2.6%)(316)2018 17.589 4.410 6,089 10.499 7,585 18.084 102.8% 104.6% 102.6% 98.6% 92.4% (423) (1.8%)2019 9.337 1.664 1.529 3.193 5,716 8.909 95.4% 97.4% (372) 406 TOTAL 115,218 69,138 24,248 93,386 16,897 110,283 95.7% 96.0% 95.2% 95.0% 93.8% 2018 & prior 105,881 67,474 22,719 90,193 101,374 95.7% 96.0% 95.2% 95.0% 93.8% 406 11,181

^{*} Claims Amt = indemnity & allowed claims expense (where latter is allowed expense over and above the claims expense included in the expense allowance for member companies)

^{**} Accident year loss ratios are as at the valuation date, for the current accident year, these loss ratios are based on partial year exposure, as such, larger variances may be expected

Accident Period	Current Selected	Prior Selected	Change
2008 / 1	48.0%	46.0%	2.0%
2008 / 2	58.0%	55.0%	3.0%
2009 / 1	49.0%	52.0%	(3.0%)
2009 / 2	62.0%	64.0%	(2.0%)
2010 / 1	53.0%	56.0%	(3.0%)
2010 / 2	69.0%	70.0%	(1.0%)
2011/1	59.0%	62.0%	(3.0%)
2011/2	77.0%	79.0%	(2.0%)
2012 / 1	68.0%	69.0%	(1.0%)
2012 / 2	87.0%	89.0%	(2.0%)
2013 / 1	75.0%	76.0%	(1.0%)
2013 / 2	96.0%	96.0%	-
2014 / 1	82.0%	84.0%	(2.0%)
2014/2	101.0%	102.0%	(1.0%)
2015 / 1	87.0%	88.0%	(1.0%)
2015 / 2	106.0%	106.0%	-
2016 / 1	89.0%	90.0%	(1.0%)
2016/2	108.0%	107.0%	1.0%
2017 / 1	93.0%	92.0%	1.0%
2017 / 2	113.0%	112.0%	1.0%
2018 / 1	96.0%	95.0%	1.0%
2018 / 2	116.0%	114.0%	2.0%
2019 / 1	96.0%	97.0%	(1.0%)
2019 / 2	117.0%	119.0%	(2.0%)
2020 / 1	100.0%	101.0%	(1.0%)
2020 / 2	123.0%	122.0%	1.0%
2021 / 1	104.0%	105.0%	(1.0%)

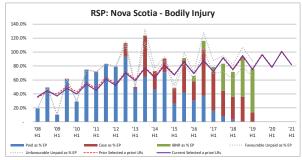


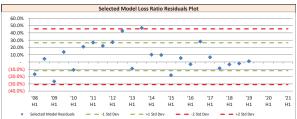
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		Mar 31,	, 2019 valuation	result			Adjust EP to 20	119 / 1 rate lev	el	Adjust Ultin	nate Claims Am	ount to 2019 /	1 clms level		
Accident Period	Actual Earned Premium	Paid Claims Amount	Case Reserves	Selected Ultimate Claims Amount*	Selected Ultimate Loss Ratio	Rate Change	Drift (RG, class, etc.)	Other	EP @ 2019 / 1 rate level	Loss Cost Trend Factor	Reform Adj Factor	Other Factor	Ult. Clms Amt @ 2019 / 1 clms level	On-Level to 2019 / 1 Loss Ratios	Weights
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]
	val data	val data	val data	val data	=[4]/[1]	industry avg EP relativity	assumption	assumption	=[1]*[6]*[7]*[8]	trend analysis	assumption	assumption	=[4]*[10]* [11]*[12]	=[13]/[9]	selected
2008 / 1	5,968	1,280	-	1,280	21.4%	1.0997	1.0000	1.0000	6,564	2.1241	1.0000	1.0000	2,720	41.4%	
2008 / 2	8,000	3,010		3,010	37.6%	1.1260	1.0000	1.0000	9,008	1.8585	1.0000	1.0000	5,595	62.1%	
2009 / 1	8,676	1,422	-	1,422	16.4%	1.1371	1.0000	1.0000	9,866	2.0434	1.0000	1.0000	2,906	29.5%	-
2009 / 2	9,586	4,023	68	4,092	42.7%	1.1424	1.0000	1.0000	10,952	1.7731	1.0000	1.0000	7,254	66.2%	
2010 / 1	4,759	2,566	-	2,566	53.9%	1.1438	1.0000	1.0000	5,443	1.9963	1.0000	1.0000	5,124	94.1%	-
2010 / 2	4,463	4,726	-	4,726	105.9%	1.1666	1.0000	1.0000	5,207	1.6483	1.0000	1.0000	7,789	149.6%	-
2011/1	3,941	3,869	35	3,904	99.0%	1.1893	1.0000	1.0000	4,687	1.9064	1.0000	1.0000	7,442	158.8%	-
2011/2	3,566	4,075		4,075	114.3%	1.2213	1.0000	1.0000	4,355	1.5307	1.0000	1.0000	6,237	143.2%	
2012 / 1	3,514	3,601	4	3,606	102.6%	1.2482	1.0000	1.0000	4,386	1.7762	1.0000	1.0000	6,405	146.0%	-
2012 / 2	4,429	5,528	870	6,398	144.4%	1.2834	1.0000	1.0000	5,684	1.4139	1.0000	1.0000	9,046	159.1%	-
2013 / 1	4,328	3,048	90	3,138	72.5%	1.2977	1.0000	1.0000	5,616	1.6818	1.0000	1.0000	5,278	94.0%	-
2013 / 2	3,995	3,402	2,348	5,749	143.9%	1.2924	1.0000	1.0000	5,163	1.2932	1.0000	1.0000	7,435	144.0%	-
2014 / 1	3,835	2,532	1,029	3,562	92.9%	1.2724	1.0000	1.0000	4,880	1.5021	1.0000	1.0000	5,350	109.6%	
2014 / 2	4,067	3,795	789	4,584	112.7%	1.2633	1.0000	1.0000	5,138	1.2021	1.0000	1.0000	5,511	107.3%	-
2015 / 1	4,108	1,939	896	2,866	69.8%	1.2507	1.0000	1.0000	5,138	1.3775	1.0000	1.0000	3,948	76.8%	6.3%
2015 / 2	4,426	2,840	2,030	5,024	113.5%	1.2242	1.0000	1.0000	5,418	1.1080	1.0000	1.0000	5,567	102.8%	6.3%
2016 / 1	4,468	2,251	1,229	3,824	85.6%	1.1937	1.0000	1.0000	5,333	1.2755	1.0000	1.0000	4,877	91.4%	14.6%
2016 / 2	4,766	2,641	3,171	6,389	134.0%	1.1529	1.0000	1.0000	5,495	1.0095	1.0000	1.0000	6,450	117.4%	14.6%
2017 / 1	5,056	1,655	2,825	4,829	95.5%	1.1297	1.0000	1.0000	5,712	1.1780	1.0000	1.0000	5,689	99.6%	14.6%
2017 / 2	7,114	2,225	2,622	7,609	107.0%	1.1103	1.0000	1.0000	7,899	0.9476	1.0000	1.0000	7,210	91.3%	14.6%
2018 / 1	8,538	2,043	2,819	7,910	92.6%	1.0860	1.0000	1.0000	9,272	1.0845	1.0000	1.0000	8,579	92.5%	14.6%
2018 / 2	9,150	2,089	3,404	10,596	115.8%	1.0510	1.0000	1.0000	9,617	0.8693	1.0000	1.0000	9,212	95.8%	14.6%
Total	120,753	64,560	24,229	101,158	83.8%	1.1663	1.0000	1.0000	140,833	1.3407	1.0000	1.0000	135,624	96.3%	100.0%
			*indemnity & a	llowed claims	expense	2018-2 AIX				on industry 20	18-2 AIX data	٧.	veighted average:	97.0%	
			from FA Valuat	ion Summary						derived from 2	019 / 1 on-lev	els	selected:	96.0%	97.0%
														current	prior

Premium adjustment factors [6]-[8], Claims adjustment factors [10]-[12], and selected experience period weights [15] are selected at the coverage level, implied aggregate factors are presented above

Accident Period	Current Selected	Prior Selected	Change
2008 / 1	36.0%	35.0%	1.0%
2008 / 2	45.0%	43.0%	2.0%
2009 / 1	37.0%	40.0%	(3.0%)
2009 / 2	48.0%	51.0%	(3.0%)
2010 / 1	40.0%	43.0%	(3.0%)
2010 / 2	54.0%	56.0%	(2.0%)
2011 / 1	45.0%	48.0%	(3.0%)
2011/2	61.0%	64.0%	(3.0%)
2012 / 1	52.0%	54.0%	(2.0%)
2012 / 2	70.0%	72.0%	(2.0%)
2013 / 1	59.0%	61.0%	(2.0%)
2013 / 2	77.0%	78.0%	(1.0%)
2014 / 1	63.0%	65.0%	(2.0%)
2014 / 2	81.0%	83.0%	(2.0%)
2015 / 1	67.0%	68.0%	(1.0%)
2015 / 2	86.0%	86.0%	-
2016 / 1	69.0%	70.0%	(1.0%)
2016 / 2	88.0%	87.0%	1.0%
2017 / 1	72.0%	72.0%	-
2017 / 2	92.0%	91.0%	1.0%
2018 / 1	75.0%	74.0%	1.0%
2018 / 2	95.0%	93.0%	2.0%
2019 / 1	75.0%	76.0%	(1.0%)
2019 / 2	96.0%	97.0%	(1.0%)
2020 / 1	78.0%	79.0%	(1.0%)
2020 / 2	101.0%	100.0%	1.0%
2021 / 1	82.0%	82.0%	





		Mar 31,	, 2019 valuation	n result			Adjust EP to 20	19 / 1 rate lev	el .	Adjust Ultin	nate Claims Am	ount to 2019 /	1 clms level		
Accident Period	Actual Earned Premium	Paid Claims Amount	Case Reserves	Selected Ultimate Claims Amount*	Selected Ultimate Loss Ratio	Rate Change	Drift (RG, class, etc.)	Other	EP @ 2019 / 1 rate level	Loss Cost Trend Factor	Reform Adj Factor	Other Factor	Ult. Clms Amt @ 2019 / 1 clms level	On-Level to 2019 / 1 Loss Ratios	Weights
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]
	val data	val data	val data	val data	=[4]/[1]	industry avg EP relativity	assumption	assumption	=[1]*[6]*[7]*[8]	trend analysis	assumption	assumption	=[4]*[10]* [11]*[12]	=[13]/[9]	selected
2008 / 1	2,984	577	-	577	19.3%	1.0997	1.0000	1.0000	3,282	2.2764	1.0000	1.0000	1,313	40.0%	-
2008 / 2	4,000	1,976		1,976	49.4%	1.1260	1.0000	1.0000	4,504	1.8650	1.0000	1.0000	3,685	81.8%	-
2009 / 1	4,338	449	-	449	10.4%	1.1371	1.0000	1.0000	4,933	2.3305	1.0000	1.0000	1,047	21.2%	-
2009 / 2	4,793	2,888	68	2,957	61.7%	1.1424	1.0000	1.0000	5,476	1.7764	1.0000	1.0000	5,252	95.9%	-
2010 / 1	4,759	1,384	-	1,384	29.1%	1.1438	1.0000	1.0000	5,443	2.1415	1.0000	1.0000	2,964	54.5%	-
2010 / 2	4,463	3,343	-	3,343	74.9%	1.1666	1.0000	1.0000	5,207	1.6324	1.0000	1.0000	5,456	104.8%	-
2011 / 1	3,941	2,789	35	2,824	71.7%	1.1893	1.0000	1.0000	4,687	1.9678	1.0000	1.0000	5,557	118.6%	-
2011/2	3,566	2,961	-	2,961	83.0%	1.2213	1.0000	1.0000	4,355	1.4999	1.0000	1.0000	4,441	102.0%	-
2012 / 1	3,514	2,776	4	2,781	79.1%	1.2482	1.0000	1.0000	4,386	1.8081	1.0000	1.0000	5,028	114.6%	-
2012 / 2	4,429	4,127	870	4,996	112.8%	1.2834	1.0000	1.0000	5,684	1.3782	1.0000	1.0000	6,886	121.1%	-
2013 / 1	4,328	2,068	90	2,158	49.9%	1.2977	1.0000	1.0000	5,616	1.6614	1.0000	1.0000	3,585	63.8%	-
2013 / 2	3,995	2,592	2,348	4,940	123.7%	1.2924	1.0000	1.0000	5,163	1.2664	1.0000	1.0000	6,256	121.2%	-
2014 / 1	3,835	1,770	1,024	2,794	72.9%	1.2724	1.0000	1.0000	4,880	1.5266	1.0000	1.0000	4,266	87.4%	-
2014 / 2	4,067	2,898	789	3,687	90.6%	1.2633	1.0000	1.0000	5,138	1.1637	1.0000	1.0000	4,290	83.5%	-
2015 / 1	4,108	1,079	896	2,006	48.8%	1.2507	1.0000	1.0000	5,138	1.4027	1.0000	1.0000	2,814	54.8%	12.5%
2015 / 2	4,426	1,865	2,030	4,049	91.5%	1.2242	1.0000	1.0000	5,418	1.0692	1.0000	1.0000	4,330	79.9%	12.5%
2016 / 1	4,468	1,373	1,226	2,943	65.9%	1.1937	1.0000	1.0000	5,333	1.2890	1.0000	1.0000	3,793	71.1%	12.5%
2016 / 2	4,766	1,793	3,166	5,533	116.1%	1.1529	1.0000	1.0000	5,495	0.9825	1.0000	1.0000	5,436	98.9%	12.5%
2017 / 1	5,056	810	2,814	3,969	78.5%	1.1297	1.0000	1.0000	5,712	1.1844	1.0000	1.0000	4,701	82.3%	12.5%
2017 / 2	7,114	583	2,589	5,926	83.3%	1.1103	1.0000	1.0000	7,899	0.9028	1.0000	1.0000	5,350	67.7%	12.5%
2018 / 1	8,538	263	2,797	6,098	71.4%	1.0860	1.0000	1.0000	9,272	1.0883	1.0000	1.0000	6,637	71.6%	12.5%
2018 / 2	9,150	75	3,223	8,509	93.0%	1.0510	1.0000	1.0000	9,617	0.8295	1.0000	1.0000	7,059	73.4%	12.5%
Total	104,638	40,438	23,968	76,859	73.5%	1.1720	1.0000	1.0000	122,638	1.3030	1.0000	1.0000	100,146	81.7%	100.0%
· <u></u>	-		*indemnity & a		expense	2018-2 AIX				on industry 20			veighted average		
			from FA Valuat	ion Summary						derived from 2	019 / 1 on-leve	els	selected	75.0%	76.0%

[6] Rate Change factors are current AHY on-level factors estimated using industry projected earned premium data, details are presented in the a priori LR model Rate Change Factors exhibit

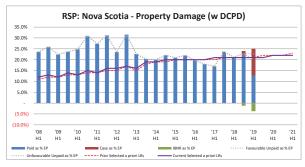
[7],[8] Additional premium adjustment factors not included in Rate Change factors [6], as necessary. If applicable, details are presented in the a priori LR model additional Premium Adjustment Factors exhibit
[10] Loss Cost Trend factors are current AHY on-level modeled loss cost adjustment factors selected as part of the associated FA industry trend analysis using industry indemnity only claims data. These loss cost adjustment factors are not confined to claims trend and include any applicable adjustments for product reform, details are presented in the a priori LR model Claims Trend and Index factors exhibit [11] Reform Adj factors are additional explicit product reform adjustment factors not included in Loss Cost Trend factors [10], as necessary. If applicable, details are presented in the a priori LR model additional Claims Adjustment

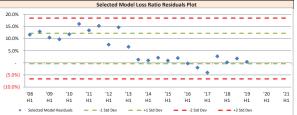
[12] Additional claims adjustment factors not included in Loss Cost Trend factors [10], as necessary. If applicable, details are presented in the a priori LR model additional Claims Adjustment Factors exhibit

current

prior

Accident Period	Current Selected	Prior Selected	Change
2008 / 1	12.0%	11.0%	1.0%
2008 / 2	13.0%	12.0%	1.0%
2009 / 1	12.0%	12.0%	-
2009 / 2	14.0%	13.0%	1.0%
2010 / 1	13.0%	13.0%	-
2010 / 2	15.0%	14.0%	1.0%
2011/1	14.0%	14.0%	-
2011/2	16.0%	15.0%	1.0%
2012 / 1	16.0%	15.0%	1.0%
2012 / 2	17.0%	17.0%	-
2013 / 1	16.0%	15.0%	1.0%
2013 / 2	19.0%	18.0%	1.0%
2014 / 1	19.0%	19.0%	-
2014 / 2	20.0%	19.0%	1.0%
2015 / 1	20.0%	20.0%	-
2015 / 2	20.0%	20.0%	-
2016 / 1	20.0%	20.0%	-
2016 / 2	20.0%	20.0%	-
2017 / 1	21.0%	20.0%	1.0%
2017 / 2	21.0%	21.0%	-
2018 / 1	21.0%	21.0%	-
2018 / 2	21.0%	21.0%	-
2019 / 1	21.0%	21.0%	-
2019 / 2	21.0%	22.0%	(1.0%)
2020 / 1	22.0%	22.0%	
2020 / 2	22.0%	22.0%	-
2021 / 1	22.0%	23.0%	(1.0%)





		Mar 31,	2019 valuatio	n result			Adjust EP to 20	19 / 1 rate leve	el .	Adjust Ultin	nate Claims An	ount to 2019 /	1 clms level		
Accident Period	Actual Earned Premium	Paid Claims Amount	Case Reserves	Selected Ultimate Claims Amount*	Selected Ultimate Loss Ratio	Rate Change	Drift (RG, class, etc.)	Other	EP @ 2019 / 1 rate level	Loss Cost Trend Factor	Reform Adj Factor	Other Factor	Ult. Clms Amt @ 2019 / 1 clms level	On-Level to 2019 / 1 Loss Ratios	Weights
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]
	val data	val data	val data	val data	=[4]/[1]	industry avg EP relativity	assumption	assumption	=[1]*[6]*[7]*[8]	trend analysis	assumption	assumption	=[4]*[10]* [11]*[12]	=[13]/[9]	selected
2008 / 1	2,984	704	-	704	23.6%	1.0997	1.0000	1.0000	3,282	1.9993	1.0000	1.0000	1,407	42.9%	
2008 / 2	4,000	1,035		1,035	25.9%	1.1260	1.0000	1.0000	4,504	1.8461	1.0000	1.0000	1,910	42.4%	
2009 / 1	4,338	973	-	973	22.4%	1.1371	1.0000	1.0000	4,933	1.9109	1.0000	1.0000	1,859	37.7%	-
2009 / 2	4,793	1,135	-	1,135	23.7%	1.1424	1.0000	1.0000	5,476	1.7645	1.0000	1.0000	2,002	36.6%	-
2010 / 1	4,759	1,183	-	1,183	24.8%	1.1438	1.0000	1.0000	5,443	1.8263	1.0000	1.0000	2,160	39.7%	-
2010 / 2	4,463	1,383		1,383	31.0%	1.1666	1.0000	1.0000	5,207	1.6868	1.0000	1.0000	2,333	44.8%	
2011/1	3,941	1,080	-	1,080	27.4%	1.1893	1.0000	1.0000	4,687	1.7457	1.0000	1.0000	1,885	40.2%	-
2011/2	3,566	1,114		1,114	31.2%	1.2213	1.0000	1.0000	4,355	1.6124	1.0000	1.0000	1,796	41.2%	
2012 / 1	3,514	825	-	825	23.5%	1.2482	1.0000	1.0000	4,386	1.6688	1.0000	1.0000	1,377	31.4%	
2012 / 2	4,429	1,401	0	1,401	31.6%	1.2834	1.0000	1.0000	5,684	1.5412	1.0000	1.0000	2,160	38.0%	-
2013 / 1	4,328	980	-	980	22.6%	1.2977	1.0000	1.0000	5,616	1.7266	1.0000	1.0000	1,693	30.1%	-
2013 / 2	3,995	809		809	20.3%	1.2924	1.0000	1.0000	5,163	1.4569	1.0000	1.0000	1,179	22.8%	
2014 / 1	3,835	762	5	767	20.0%	1.2724	1.0000	1.0000	4,880	1.4129	1.0000	1.0000	1,084	22.2%	-
2014/2	4,067	898	0	898	22.1%	1.2633	1.0000	1.0000	5,138	1.3598	1.0000	1.0000	1,221	23.8%	
2015 / 1	4,108	860	-	860	20.9%	1.2507	1.0000	1.0000	5,138	1.3187	1.0000	1.0000	1,134	22.1%	-
2015/2	4,426	975		975	22.0%	1.2242	1.0000	1.0000	5,418	1.2692	1.0000	1.0000	1,237	22.8%	-
2016/1	4,468	877	4	881	19.7%	1.1937	1.0000	1.0000	5,333	1.2306	1.0000	1.0000	1,084	20.3%	16.7%
2016/2	4,766	848	5	856	18.0%	1.1529	1.0000	1.0000	5,495	1.1844	1.0000	1.0000	1,014	18.5%	16.7%
2017 / 1	5,056	846	11	860	17.0%	1.1297	1.0000	1.0000	5,712	1.1483	1.0000	1.0000	988	17.3%	16.7%
2017 / 2	7,114	1,642	33	1,682	23.7%	1.1103	1.0000	1.0000	7,899	1.1054	1.0000	1.0000	1,860	23.5%	16.7%
2018 / 1	8,538	1,780	22	1,812	21.2%	1.0860	1.0000	1.0000	9,272	1.0718	1.0000	1.0000	1,942	20.9%	16.7%
2018 / 2	9,150	2,014	181	2,087	22.8%	1.0510	1.0000	1.0000	9,617	1.0316	1.0000	1.0000	2,153	22.4%	16.7%
Total	104,638	24,122	261	24,299	23.2%	1.1720	1.0000	1.0000	122,638	1.4600	1.0000	1.0000	35,478	28.9%	100.0%
			*indemnity & a		expense	2018-2 AIX				on industry 20			weighted average:		
			from FA Valuat	tion Summary						derived from 2	019 / 1 on-lev	els	selected:		21.0%
														current	prior

[6] Rate Change factors are current AHY on-level factors estimated using industry projected earned premium data, details are presented in the a priori LR model Rate Change Factors exhibit

[7],[8] Additional premium adjustment factors not included in Rate Change factors [6], as necessary. If applicable, details are presented in the a priori LR model additional Premium Adjustment Factors exhibit
[10] Loss Cost Trend factors are current AHY on-level modeled loss cost adjustment factors selected as part of the associated FA industry trend analysis using industry indemnity only claims data. These loss cost adjustment factors are not confined to claims trend and include any applicable adjustments for product reform, details are presented in the a priori LR model Claims Trend and Index factors exhibit [11] Reform Adj factors are additional explicit product reform adjustment factors not included in Loss Cost Trend factors [10], as necessary. If applicable, details are presented in the a priori LR model additional Claims Adjustment

[12] Additional claims adjustment factors not included in Loss Cost Trend factors [10], as necessary. If applicable, details are presented in the a priori LR model additional Claims Adjustment Factors exhibit

Estimated and Selected Ultimate Losses by Method

as at June 30, 2019
Coverage: Third Party Liability
RSP: Nova Scotia
Amounts in: \$1,000s

		Actual Exp	erience										Ulti	mate Loss Estimates									
Accident Year	Earned Premium	Paid Claims to Date	Case Reserves	Reported to Date	ELR Method*	Link Ratio Method	Implied BF ELR Method weight*	Link Patio	BF Method*	ELR Method weight	Link Ratio Method weight	ELR & LR Wtd Method		User Defined User Defined	ELR Method Ult LR*	Link Ratio Method Ult LR	BF Method Ult LR*	ELR & LR Wtd Method Ult LR	Incurred (Zero IBNR) Ult LR	User Defined 1 Ult LR	User Defined 2 Ult LR	Selected Ultimate Claims Amount	Selected Ultimate Loss Ratio
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14] [15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
															=([5]/[1])	=([6]/[1])	=([9]/[1])	=([12]/[1])	=([13]/[1])	=([14]/[1])	=([15]/[1])		=([23]/[1])
2007	1,374	589	-	589		589						589	589			42.9%		42.9%	42.9%			589	42.9%
2008	6,983	4,290	-	4,290		4,290						4,290	4,290			61.4%		61.4%	61.4%			4,290	61.4%
2009	9,131	5,445	68	5,513		5,513						5,513	5,513			60.4%		60.4%	60.4%			5,513	60.4%
2010	9,222	7,292	-	7,292	5,602	7,292	-	100.0%	7,292			7,292	7,292		60.7%	79.1%	79.1%	79.1%	79.1%			7,292	79.1%
2011	7,506	7,978	-	7,978	5,071	7,978	-	100.0%	7,978			7,978	7,978		67.6%	106.3%	106.3%	106.3%	106.3%			7,978	106.3%
2012	7,943	9,138	823	9,961	6,243	9,961	-	100.0%	9,961			9,961	9,961		78.6%	125.4%	125.4%	125.4%	125.4%			9,961	125.4%
2013	8,323	6,509	2,418	8,927	7,081	8,927	-	100.0%	8,927			8,927	8,927		85.1%	107.3%	107.3%	107.3%	107.3%			8,927	107.3%
2014	7,902	6,646	1,603	8,249	7,253	8,249	-	100.0%	8,249			8,249	8,249		91.8%	104.4%	104.4%	104.4%	104.4%			8,249	104.4%
2015	8,534	5,188	2,845	8,033	8,265	8,139	(10.1%)	110.1%	8,126			8,063	8,033		96.9%	95.4%	95.2%	94.5%	94.1%			8,127	95.2%
2016	9,233	5,522	4,061	9,584	9,123	10,352	12.5%	87.5%	10,198			9,874	9,584		98.8%	112.1%	110.4%	106.9%	103.8%			10,199	110.5%
2017	12,141	4,467	4,812	9,278	12,709	11,048	26.0%	74.0%	11,480			12,174	9,278		104.7%	91.0%	94.6%	100.3%	76.4%			12,165	100.2%
2018	17,589	4,410	6,089	10,499	18,703	14,042	36.9%	63.1%	15,762			17,902	10,499		106.3%	79.8%	89.6%	101.8%	59.7%			18,084	102.8%
2019	9,337	1,664	1,530	3,193	8,963	4,000	48.6%	51.4%	6,412				3,193		96.0%	42.8%	68.7%		34.2%			8,909	95.4%
Total	115,218	69,138	24,250	93,388	89,013	100,383			94,386			100,815	93,388									110,285	

^{*}Earned Premium prior to data modernization (2009 / 2) was not allocated on a coverage level

^{**}For 'off-half' valuation quarters (Mar and Sep), the current accident year (CAY) by method Ultimate Loss estimates ([5] to [22]) are aggregated from a coverage level

Comparison of Estimated Ultimate Losses by Method as at June 30, 2019

Coverage: Third Party Liability RSP: Nova Scotia Amounts in: \$1,000s

					Curren	t Valuation F	Results (as at .	Jun 2019)						Prior \	/aluation Results (as at Mar 2	2019)			Cha	nge from Pri	or Valuation	1
Accident Year	ELR Method*	Link Ratio Method	BF Method*	ELR & LR Wtd Method	Incurred (Zero IBNR)	User Defined	User Defined 2	Selected IBNR Method**	Selected IBNR	Selected Ultimate	Selected Ultimate LR	ELR Method*	LR Ratio Method	BF Method*	Selected IBNR Method**	Selected IBNR	Selected Ultimate	Selected Ultimate LR	Incurred to Date	Selected IBNR	Selected Ultimate	Selected Ultimate LR
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
																				=([9]-[16])	=([10]-[17])	=([11]-[18])
2007		589		589	589			N/A	-	589	42.9%		589		N/A	-	589	42.9%	-	-	-	-
2008		4,290		4,290	4,290			N/A	-	4,290	61.4%		4,290		N/A	-	4,290	61.4%	-	-	-	-
2009		5,513		5,513	5,513			N/A	-	5,513	60.4%		5,514		N/A	-	5,514	60.4%	-	-	-	-
2010	5,602	7,292	7,292	7,292	7,292			N/A	-	7,292	79.1%	5,789	7,292	7,292	N/A	-	7,292	79.1%	-	-	-	-
2011	5,071	7,978	7,978	7,978	7,978			N/A	-	7,978	106.3%	5,260	7,978	7,978	N/A	-	7,978	106.3%	-	-	-	-
2012	6,243	9,961	9,961	9,961	9,961			N/A	-	9,961	125.4%	6,367	10,003	10,003	N/A	-	10,003	125.9%	(42)	-	(42)	(0.5%)
2013	7,081	8,927	8,927	8,927	8,927			N/A		8,927	107.3%	7,124	8,887	8,887	N/A	-	8,887	106.8%	40	-	40	0.5%
2014	7,253	8,249	8,249	8,249	8,249			N/A	-	8,249	104.4%	7,370	8,146	8,146	N/A	-	8,146	103.1%	103	-	103	1.3%
2015	8,265	8,139	8,126	8,063	8,033			N/A	94	8,127	95.2%	8,307	7,892	7,890	N/A	185	7,890	92.5%	328	(91)	237	2.7%
2016	9,123	10,352	10,198	9,874	9,584			N/A	615	10,199	110.5%	9,120	10,324	10,126	N/A	921	10,212	110.6%	292	(306)	(14)	(0.1%)
2017	12,709	11,048	11,480	12,174	9,278			N/A	2,887	12,165	100.2%	12,619	11,347	11,742	N/A	3,111	12,438	102.2%	(49)	(224)	(273)	(2.0%)
2018	18,703	14,042	15,762	17,902	10,499			N/A	7,585	18,084	102.8%	18,542	14,130	15,904	N/A	8,152	18,507	104.6%	145	(567)	(422)	(1.8%)
2019	8,963	4,000	6,412	-	3,193			N/A	5,716	8,909	95.4%	9,341	4,476	8,085	N/A	2,733	4,524	97.4%	1,402	2,983	4,385	(2.0%)
Total	89,013	100,383	94,386	100,815	93,388				16,897	110,285		89,838	100,869	96,054		15,102	106,271		2,219	1,795	4,014	
2018 & Prior	80,049	96,382	87,974	100,815	90,195				11,181	101,376		80,498	96,393	87,969		12,369	101,747		817	(1,188)	(371)	

 ^{2018 &}amp; Prior
 80,049
 96,382
 87,974
 100,815
 90,195

 *Earned Premium prior to data modernization (2009 / 2) was not allocated on a coverage level

^{**}IBNR selected on a coverage level and aggregated to a Government Line (or Total) level

Estimated and Selected Ultimate Losses by Method

as at June 30, 2019
Coverage: Bodily Injury
RSP: Nova Scotia
Amounts in: \$1,000s

		Actual Ex	perience										Ulti	mate Loss Est	timates									
Accident Year	Earned Premium	Paid Claims to Date	Case Reserves	Reported to Date	ELR Method*	Link Ratio Method	Implied BF ELR Method weight*	Implied BF Link Ratio Method weight*	BF Method*	ELR Method weight	Link Ratio Method weight	ELR & LR Wtd Method	Incurred (Zero IBNR)	User Defined 1	Data Correction	ELR Method Ult LR*	Link Ratio Method Ult LR	BF Method Ult LR*	ELR & LR Wtd Method Ult LR*	Incurred (Zero IBNR) Ult LR	User Defined 1 Ult LR	Data Correction Ult LR	Selected Ultimate Claims Amount	Selected Ultimate Loss Ratio*
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
2007/4		-									400.007		-			=([5]/[1])	=([6]/[1])	=([9]/[1])	=([12]/[1])	=([13]/[1])	=([14]/[1])	=([15]/[1])		=([23]/[1])
2007 / 1	71	5	-	5		5				-	100.0%	5	5										5	
2007 / 2	1,302 2,984	248 577	-	248 577		248 577				-	100.0%	248 577	248 577										248 577	
2008 / 1	4,000	1,976	-	1,976		1,976					100.0% 100.0%	1,976	1,976										1,976	
,	4,338	449		449		449						449	449										449	
2009 / 1 2009 / 2	4,793	2,888	- 68	2,957	2,300	2,957		100.0%	2,957	-	100.0% 100.0%	2,957	2,957			48.0%	61.7%	61.7%	61.7%	61.7%			2,957	61.7%
2010 / 1	4,759	1,384	-	1,384	1.904	1,384		100.0%	1,384		100.0%	1,384	1,384			40.0%	29.1%	29.1%	29.1%	29.1%			1,384	29.1%
2010 / 2	4,463	3,343		3,343	2,410	3,343		100.0%	3,343		100.0%	3,343	3,343			54.0%	74.9%	74.9%	74.9%	74.9%			3,343	74.9%
2010 / 2	3,941	2,824		2,824	1.773	2,824		100.0%	2,824		100.0%	2,824	2,824			45.0%	74.5%	71.7%	74.5%	74.5%			2,824	71.7%
2011 / 2	3,566	2,961		2,961	2,175	2,961		100.0%	2,961		100.0%	2,961	2,961			61.0%	83.0%	83.0%	83.0%	83.0%			2,961	83.0%
2012 / 1	3,514	2,778		2,778	1,827	2,778		100.0%	2,778		100.0%	2,778	2,778			52.0%	79.0%	79.0%	79.0%	79.0%			2,778	79.0%
2012 / 2	4,429	4,133	823	4,956	3,100	4,956		100.0%	4,956		100.0%	4,956	4,956			70.0%	111.9%	111.9%	111.9%	111.9%			4,956	111.9%
2013 / 1	4,328	2,068	90	2,158	2,553	2,158		100.0%	2,158		100.0%	2,158	2,158			59.0%	49.9%	49.9%	49.9%	49.9%			2,158	49.9%
2013 / 2	3,995	2,652	2,328	4,980	3,076	4,980		100.0%	4,980	-	100.0%	4,980	4,980			77.0%	124.7%	124.7%	124.7%	124.7%			4,980	124.7%
2014 / 1	3,835	1,845	1,016	2,860	2,416	2,860	-	100.0%	2,860	-	100.0%	2,860	2,860			63.0%	74.6%	74.6%	74.6%	74.6%			2,860	74.6%
2014 / 2	4,067	3,141	587	3,729	3,295	3,729	-	100.0%	3,729	-	100.0%	3,729	3,729			81.0%	91.7%	91.7%	91.7%	91.7%			3,729	91.7%
2015 / 1	4,108	1,111	869	1,980	2,753	1,980	-	100.0%	1,980	-	100.0%	1,980	1,980			67.0%	48.2%	48.2%	48.2%	48.2%			1,980	48.2%
2015 / 2	4,426	2,243	1,976	4,219	3,806	4,325	2.5%	97.5%	4,312	12.5%	87.5%	4,260	4,219			86.0%	97.7%	97.4%	96.3%	95.3%			4,313	97.4%
2016 / 1	4,468	1,705	1,114	2,819	3,083	2,967	5.0%	95.0%	2,973	25.0%	75.0%	2,996	2,819			69.0%	66.4%	66.5%	67.1%	63.1%			2,974	66.6%
2016 / 2	4,765	2,092	2,944	5,036	4,193	5,655	10.9%	89.1%	5,495	37.5%	62.5%	5,107	5,036			88.0%	118.7%	115.3%	107.2%	105.7%			5,495	115.3%
2017 / 1	5,052	1,127	2,613	3,740	3,637	4,555	17.9%	82.1%	4,391	50.0%	50.0%	4,096	3,740			72.0%	90.2%	86.9%	81.1%	74.0%			4,096	81.1%
2017 / 2	7,089	881	2,176	3,057	6,522	4,001	23.6%	76.4%	4,596	62.5%	37.5%	5,577	3,057			92.0%	56.4%	64.8%	78.7%	43.1%			5,577	78.7%
2018 / 1	8,500	319	2,861	3,180	6,375	4,611	31.0%	69.0%	5,159	75.0%	25.0%	5,934	3,180			75.0%	54.2%	60.7%	69.8%	37.4%			5,934	69.8%
2018 / 2	9,089	271	3,168	3,439	8,634	5,525	37.8%	62.2%	6,699	87.5%	12.5%	8,246	3,439			95.0%	60.8%	73.7%	90.7%	37.8%			8,246	90.7%
2019 / 1	9,337	37	1,024	1,061	7,003	2,088	49.2%	50.8%	4,505	100.0%	-		1,061			75.0%	22.4%	48.2%					7,002	75.0%
Total	115,218	43.055	23.658	66.713	72.836	73.889			75.038			76.378	66,713										83,799	

^{*}Earned Premium prior to data modernization (2009 / 2) was not allocated on a coverage level

^{**}For 'off-half' valuation quarters (Mar and Sep), the current accident half-year (CAHY) by method Ultimate Loss estimates ([5] to [22]) are based on projected full AHY Earned Premium estimates

Comparison of Estimated IBNR by Method

as at June 30, 2019 Coverage: Bodily Injury RSP: Nova Scotia

Amounts in: \$1,000s

Selected HSM Method Link Ratio Berker Method Bark Reserve Method Bark Reserve Selected BMN Method Bark Sel						Currer	nt Valuation R	esults (as at .	Jun 2019)						Prior	Valuation Results (as at Ma	r 2019)			Cha	ange from Pr	or Valuation	n
2007 1	Accident Year					(Zero IBNR)		Correction	Selected IBNR Method			Ultimate				Selected IBNR Method			Ultimate				Selected Ultimate LR*
DORY 1		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]			[22]
2007/2 2008/1 2																					=([9]-[16])	=([10]-[17])	=([11]-[18])
2008 / 1			-		-	-				-							-			-	-	-	
Link Ratio Method - 1,976 Link Ratio Method - 1,976 Link Ratio Method - 1,976 Link Ratio Method - 2,957 61,7% (512) Link Ratio Method - 2,257 (512) Link Ratio M			-		-	-				-							-			-	-	-	
2009 1			-		-	-				-							-			-	-	-	
2009 / 2 (6-56)			-		-	-				-				-			-			-	-	-	
2010 / 1			-		-	-				-							-			-	-	-	
2010 / 2 (933)			-	-	-	-				-				-	-	Link Ratio Method	-	,		-	-	-	-
2011 1			-	-	-	-				-					-		-			-	-	-	-
2011 2 1785			-	-	-	-				-					-		-			-	-	-	-
2012/1 (950)			-	-	-	-			Link Ratio Method	-					-	Link Ratio Method	-			-	-	-	-
2012/2 (1,856)			-	-	-	-			Link Ratio Method	-					-	Link Ratio Method	-			-	-	-	-
2013 1 396 -			-	-	-	-			Link Ratio Method	-					-	Link Ratio Method	-	2,781	79.1%	(3)	-	(3)	
2013/2 (1,904)	2012 / 2	(1,856)	-	-	-	-			Link Ratio Method	-	4,956	111.9%	(1,807)	-	-	Link Ratio Method	-	4,996	112.8%	(40)	-	(40)	(0.9%)
2014/1 (444)	2013 / 1	396	-	-	-	-			Link Ratio Method	-	2,158	49.9%	482	-	-	Link Ratio Method	-	2,158	49.9%	-	-	-	-
2014 / 2	2013/2	(1,904)	-	-	-	-			Link Ratio Method	-	4,980	124.7%	(1,824)	-	-	Link Ratio Method	-	4,940	123.7%	40	-	40	1.0%
2015/1 773	2014 / 1	(444)	-		-	-			Link Ratio Method	-	2,860	74.6%	(302)	-	-	Link Ratio Method	-	2,794	72.9%	66	-	66	1.7%
2015 / 2 (413) 106 94 41 - BF Method 94 4,313 97.4% (89) 164 154 BF Method 154 4,049 91.5% 323 (60) 263 2016 / 1 264 149 155 178 - BF Method 155 2,974 66.6% 529 233 258 ELR & LR N'td Method 344 2,943 65.9% 220 (139) 31 2016 / 2 (842) 619 459 71 - BF Method 459 5,495 115.3% (812) 977 574 BF Method 574 5,533 16.1% 77 (115) (88) 2017 / 1 (103) 814 650 356 - ELR & LR Wtd Method 356 4,096 81.1% 17 894 720 ELR & LR Wtd Method 345 3,969 78.5% 117 11 128 2017 / 2 3,465 945 1,539 2,520 - ELR & LR Wtd Method 2,520 5,577 78.7% 3,302 1,114 1,683 ELR & LR Wtd Method 345 3,969 78.5% (115) (235) 2018 / 1 3,195 1,431 1,978 2,754 - ELR & LR Wtd Method 2,754 5,934 69.8% 3,258 1,499 2,077 ELR & LR Wtd Method 3,038 6,098 71.4% 120 (284) (154) 2019 / 1	2014/2	(434)	-		-	-			Link Ratio Method	-	3,729	91.7%	(311)	-	-	Link Ratio Method	-	3,687	90.6%	42	-	42	1.1%
2016/1 264 149 155 178 - BF Method 155 2,974 66.6% 529 233 258 ELR & LR Wtd Method 344 2,943 65.9% 220 (189) 31 2016/2 (842) 619 459 71 - BF Method 459 5,495 115.3% (812) 797 574 BF Method 574 5,533 116.1% 77 (115) (38) 2017/1 (103) 814 650 356 - ELR & LR Wtd Method 356 4,096 81.1% 17 894 720 ELR & LR Wtd Method 345 3,969 78.5% 117 11 128 2017/2 3,465 945 1,539 2,520 - ELR & LR Wtd Method 2,520 5,577 78.7% 3,302 1,114 1,683 ELR & LR Wtd Method 2,755 5,926 83.3% (115) (235) (350) 2018/1 3,195 1,431 1,978 2,754 - ELR & LR Wtd Method 2,754 5,934 69.8% 3,258 1,499 2,077 ELR & LR Wtd Method 3,038 6,098 71.6% 120 (245) (156) 2018/2 5,196 2,086 3,360 4,007 - ELR & LR Wtd Method 4,807 8,246 90.7% 5,212 2,333 3,570 ELR & LR Wtd Method 3,038 6,098 71.6% 120 (246) (156) 2019/1	2015 / 1	773	-		-	-			Link Ratio Method	-	1,980	48.2%	819	23	31	BF Method	31	2,006	48.8%	5	(31)	(26)	(0.6%)
2016 / 2 (842) 619 459 71 - BF Method 459 5,495 115.3% (812) 797 574 BF Method 574 5,533 116.1% 77 (115) (38) 2017 / 1 (103) 814 650 356 - BLR & LR WIND Method 2,50 5,570 78.7% 3,302 1,114 1,683 ELR & LR WIND Method 2,75 5,926 83.3% (115) (235) 2018 / 1 (319) 1,978 1,1978 2,754 - BLR & LR WIND Method 2,754 5,934 69.8% 3,258 1,499 2,077 ELR & LR WIND Method 3,038 6,098 71.4% 120 (284) (164) 2019 / 2	2015 / 2	(413)	106	94	41	-			BF Method	94	4,313	97.4%	(89)	164	154	BF Method	154	4,049	91.5%	323	(60)	263	5.9%
2017/1 (103) 814 650 356 - ELR & LR Wtd Method 356 4,096 81.1% 17 894 720 ELR & LR Wtd Method 345 3,969 78.5% 117 11 128 2017/2 3,465 945 1,539 2,520 - ELR & LR Wtd Method 2,754 5,946 69.8% 3,258 1,431 1,978 2,754 - ELR & LR Wtd Method 2,754 5,946 69.8% 3,258 1,499 2,077 ELR & LR Wtd Method 3,038 6,098 71.4% 120 (284) (154) 2018/2 5,196 2,086 3,260 4,807 - ELR & LR Wtd Method 4,807 8,246 90.7% 5,212 2,383 3,570 ELR & LR Wtd Method 5,212 8,509 93.0% 141 (405) (264) 2019/1 5,941 7,002 75.0% 6,692 1,764 5,401 - 2,905 3,531 76.0% 435 3,036 3,471 Total 3,436 6,150 8,135 10,726 - 17,086 83,799 11,977 8,870 14,468 - 15,358 80,642 1,428 1,728 3,156	2016 / 1	264	149	155	178	-			BF Method	155	2,974	66.6%	529	233	258	ELR & LR Wtd Method	344	2,943	65.9%	220	(189)	31	0.7%
2017/2 3,465 945 1,539 2,520 - ELR & LR Wtd Method 2,520 5,577 78.7% 3,302 1,114 1,683 ELR & LR Wtd Method 2,755 5,926 83.3% (115) (235) (350) (2018/1 3,195 1,431 1,978 2,754 - ELR & LR Wtd Method 2,754 5,934 69.8% 3,258 1,499 2,077 ELR & LR Wtd Method 3,08 6,098 71.4% 120 (284) (164) (250) (2	2016 / 2	(842)	619	459	71	-			BF Method	459	5,495	115.3%	(812)	797	574	BF Method	574	5,533	116.1%	77	(115)	(38)	(0.8%)
2018/1 3,195 1,431 1,978 2,754 - ELR & LR Wtd Method 2,754 5,934 69.8% 3,258 1,499 2,077 ELR & LR Wtd Method 3,038 6,098 71.4% 120 (284) (164) 2018/2 5,196 2,086 3,260 4,807 - ELR & LR Wtd Method 4,807 8,246 90.7% 5,212 2,383 3,570 ELR & LR Wtd Method 5,212 8,509 93.0% 141 (405) (254) 2019/1	2017 / 1	(103)	814	650	356	-			ELR & LR Wtd Method	356	4,096	81.1%	17	894	720	ELR & LR Wtd Method	345	3,969	78.5%	117	11	128	2.6%
2018/2 5,196 2,086 3,260 4,807 - ELR &LR Wtd Method 4,807 8,246 90.7% 5,212 2,383 3,570 ELR &LR Wtd Method 5,212 8,509 93.0% 141 (405) (264) 2019/1 5,941 7,002 75.0% 6,692 1,764 5,401 - 2,905 3,531 76.0% 435 3,036 3,471 2019/1 7,004 3,436 6,150 8,135 10,726 - 17,086 83,799 11,977 8,870 14,468 15,358 80,642 1,428 1,728 3,156	2017 / 2	3,465	945	1,539	2,520	-			ELR & LR Wtd Method	2,520	5,577	78.7%	3,302	1,114	1,683	ELR & LR Wtd Method	2,755	5,926	83.3%	(115)	(235)	(350)	(4.6%)
2019/1 5,941 7,002 75,0% 6,692 1,764 5,401 2,905 3,531 76,0% 435 3,036 3,471 Total 3,436 6,150 8,135 10,726 - 17,086 83,799 11,977 8,870 14,468 15,338 80,642 1,428 1,728 3,156	2018 / 1	3,195	1,431	1,978	3 2,754	-			ELR & LR Wtd Method	2,754	5,934	69.8%	3,258	1,499	2,077	ELR & LR Wtd Method	3,038	6,098	71.4%	120	(284)	(164)	(1.6%)
Total 3,436 6,150 8,135 10,726 - 17,086 83,799 11,977 8,870 14,468 15,358 80,642 1,428 1,728 3,156	2018 / 2	5,196	2,086	3,260	4,807	-			ELR & LR Wtd Method	4,807	8,246	90.7%	5,212	2,383	3,570	ELR & LR Wtd Method	5,212	8,509	93.0%	141	(405)	(264)	(2.3%)
	2019 / 1	-		-	-				-	5,941	7,002	75.0%	6,692	1,764	5,401		2,905	3,531	76.0%	435	3,036	3,471	(1.0%)
	Total	3,436	6,150	8,135	10,726	-				17,086	83,799		11,977	8,870	14,468		15,358	80,642		1,428	1,728	3,156	
	018 / 2 & Prio	3,436	6.150	8.135	10.726				1	11.145	76.797		5.285	7.106	9.067	1	12.453	77.111		993	(1.308)	(315)	

^{*}Earned Premium prior to data modernization (2009 / 2) was not allocated on a coverage level
**Current accident half-year IBNR and Ultimate Loss estimates derived from the CAHY Selections exhibit

Estimated and Selected Ultimate Losses by Method

as at June 30, 2019

Coverage: Property Damage (w DCPD)

RSP: Nova Scotia Amounts in: \$1,000s

		Actual Ex	perience										Ultii	mate Loss Es	timates									
Accident Year	Earned Premium	Paid Claims to Date	Case Reserves	Reported to Date	ELR Method*	Link Ratio Method	Implied BF ELR Method weight*	Implied BF Link Ratio Method weight*	BF Method*	ELR Method weight	Link Ratio Method weight	ELR & LR Wtd Method	Incurred (Zero IBNR)	User Defined	Data Correction	ELR Method Ult LR*	Link Ratio Method Ult LR	BF Method Ult LR*	ELR & LR Wtd Method Ult LR*	Incurred (Zero IBNR) Ult LR	User Defined 1 Ult LR	Data Correction Ult LR	Selected Ultimate Claims Amount	Selected Ultimate Loss Ratio*
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
/-																=([5]/[1])	=([6]/[1])	=([9]/[1])	=([12]/[1])	=([13]/[1])	=([14]/[1])	=([15]/[1])		=([23]/[1])
2007 / 1	71	33		33		33				-	100.0%	33	33										33	
2007 / 2	1,302	304		304		304				-	100.0%	304	304										304	
2008 / 1	2,984	704	-	704		704				-	100.0%	704	704										704	
2008 / 2	4,000	1,035		1,035		1,035				-	100.0%	1,035	1,035										1,035	
2009 / 1	4,338	973		973		973				-	100.0%	973	973										973	
2009 / 2	4,793	1,135	-	1,135	671	1,135	-	100.0%	1,135	-	100.0%	1,135	1,135			14.0%	23.7%	23.7%	23.7%	23.7%			1,135	23.7%
2010 / 1	4,759	1,183		1,183	619	1,183	-	100.0%	1,183	-	100.0%	1,183	1,183			13.0%	24.8%	24.8%	24.8%	24.8%			1,183	24.8%
2010 / 2	4,463	1,383	-	1,383	669	1,383	-	100.0%	1,383	-	100.0%	1,383	1,383			15.0%	31.0%	31.0%	31.0%	31.0%			1,383	31.0%
2011 / 1	3,941	1,080		1,080	552	1,080	-	100.0%	1,080	-	100.0%	1,080	1,080			14.0%	27.4%	27.4%	27.4%	27.4%			1,080	27.4%
2011 / 2	3,566	1,114		1,114	571	1,114	-	100.0%	1,114	-	100.0%	1,114	1,114			16.0%	31.2%	31.2%	31.2%	31.2%			1,114	31.2%
2012 / 1	3,514	825	-	825	562	825	-	100.0%	825	-	100.0%	825	825			16.0%	23.5%	23.5%	23.5%	23.5%			825	23.5%
2012 / 2	4,429	1,402	0	1,402	753	1,402	-	100.0%	1,402	-	100.0%	1,402	1,402			17.0%	31.7%	31.7%	31.7%	31.7%			1,402	31.7%
2013 / 1	4,328	980	-	980	692	980	-	100.0%	980	-	100.0%	980	980			16.0%	22.6%	22.6%	22.6%	22.6%			980	22.6%
2013 / 2	3,995	809	-	809	759	809	-	100.0%	809	-	100.0%	809	809			19.0%	20.3%	20.3%	20.3%	20.3%			809	20.3%
2014 / 1	3,835	762		762	729	762	-	100.0%	762	-	100.0%	762	762			19.0%	19.9%	19.9%	19.9%	19.9%			762	19.9%
2014 / 2	4,067	898	-	898	813	898	-	100.0%	898	-	100.0%	898	898			20.0%	22.1%	22.1%	22.1%	22.1%			898	22.1%
2015 / 1	4,108	860	-	860	822	860	-	100.0%	860	-	100.0%	860	860			20.0%	20.9%	20.9%	20.9%	20.9%			860	20.9%
2015 / 2	4,426	975	-	975	885	975	-	100.0%	975	12.5%	87.5%	963	975			20.0%	22.0%	22.0%	21.8%	22.0%			975	22.0%
2016 / 1	4,468	877		877	894	877	-	100.0%	877	25.0%	75.0%	881	877			20.0%	19.6%	19.6%	19.7%	19.6%			877	19.6%
2016 / 2	4,765	848	4	852	953	852	0.1%	99.9%	852	37.5%	62.5%	890	852			20.0%	17.9%	17.9%	18.7%	17.9%			853	17.9%
2017 / 1	5,052	844	0	844	1,061	849	0.6%	99.4%	850	50.0%	50.0%	955	844			21.0%	16.8%	16.8%	18.9%	16.7%			849	16.8%
2017 / 2	7,089	1,614	23	1,637	1,489	1,643	0.4%	99.6%	1,643	62.5%	37.5%	1,547	1,637			21.0%	23.2%	23.2%	21.8%	23.1%			1,643	23.2%
2018 / 1	8,500	1,765	23	1,788	1,785	1,799	0.6%	99.4%	1,798	75.0%	25.0%	1,788	1,788			21.0%	21.2%	21.2%	21.0%	21.0%			1,798	21.2%
2018 / 2	9,089	2,055	37	2,092	1,909	2,108	0.7%	99.3%	2,106	87.5%	12.5%	1,934	2,092			21.0%	23.2%	23.2%	21.3%	23.0%			2,106	23.2%
2019 / 1	9,337	1,627	505	2,132	1,961	1,913	(11.5%)	111.5%	1,907	100.0%			2,132			21.0%	20.5%	20.4%					1,907	20.4%
Total	115,218	26,083	592	26,675	19,148	26,493			23,439			24,436	26,675										26,486	

^{*}Earned Premium prior to data modernization (2009 / 2) was not allocated on a coverage level

^{**}For 'off-half' valuation quarters (Mar and Sep), the current accident half-year (CAHY) by method Ultimate Loss estimates ([5] to [22]) are based on projected full AHY Earned Premium estimates

Comparison of Estimated IBNR by Method

as at June 30, 2019

Coverage: Property Damage (w DCPD)
RSP: Nova Scotia

Amounts in: \$1,000s

					Currer	nt Valuation R	esults (as at .	Jun 2019)						Prior	Valuation Results (as at Mar	2019)			Cha	ange from Pr	ior Valuatio	n
Accident Year	ELR Method IBNR*	Link Ratio Method IBNR	BF Method IBNR*	ELR & LR Wtd Method IBNR	Incurred (Zero IBNR) IBNR	User Defined 1 IBNR	User Defined 2 IBNR	Selected IBNR Method	Selected IBNR	Selected Ultimate	Selected Ultimate LR*	ELR Method IBNR*	Link Ratio Method IBNR	BF Method IBNR*	Selected IBNR Method	Selected IBNR	Selected Ultimate	Selected Ultimate LR*	Incurred to Date	Selected IBNR	Selected Ultimate	Selected Ultimate LR*
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
																				=([9]-[16])	=([10]-[17])	=([11]-[18])
2007 / 1	1	-		-	-			Link Ratio Method	-	33			-		Link Ratio Method	-	33		-	-	-	
2007 / 2	1	-		-	-			Link Ratio Method	-	304			-		Link Ratio Method	-	304		-	-	-	
2008 / 1	1	-			-			Link Ratio Method	-	704			-		Link Ratio Method	-	704		-	-	-	
2008 / 2	1	-			-			Link Ratio Method	-	1,035			-		Link Ratio Method	-	1,035		-	-	-	
2009 / 1	1	-			-			Link Ratio Method	-	973			-		Link Ratio Method	-	973		-	-	-	
2009 / 2	(464)	-	-	-	-			Link Ratio Method	-	1,135	23.7%	(512)	-	-	Link Ratio Method	-	1,135	23.7%	-	-	-	
2010 / 1	(564)	-	-	-				Link Ratio Method	-	1,183	24.8%	(564)	-	-	Link Ratio Method	-	1,183	24.8%	-	-	-	
2010 / 2	(714)	-	-	-				Link Ratio Method	-	1,383	31.0%	(758)	-	-	Link Ratio Method	-	1,383	31.0%	-	-	-	
2011 / 1	(528)	-	-	-	-			Link Ratio Method	-	1,080	27.4%	(528)	-	-	Link Ratio Method	-	1,080	27.4%	-	-	-	-
2011/2	(544)	-	-	-	-			Link Ratio Method	-	1,114	31.2%	(579)	-	-	Link Ratio Method	-	1,114	31.2%	-	-	-	-
2012 / 1	(263)	-	-	-	-			Link Ratio Method	-	825	23.5%	(298)	-	-	Link Ratio Method	-	825	23.5%	-	-	-	-
2012 / 2	(649)	-		-				Link Ratio Method	-	1,402	31.7%	(649)	-	-	Link Ratio Method	-	1,401	31.6%	-	-	-	0.1%
2013 / 1	(288)	-		-				Link Ratio Method	-	980	22.6%	(331)	-	-	Link Ratio Method	-	980	22.6%	-	-	-	
2013 / 2	(50)		-	-	-			Link Ratio Method	-	809	20.3%	(90)	-	-	Link Ratio Method		809	20.3%	-	-	-	
2014 / 1	(33)		-	-	-			Link Ratio Method	-	762	19.9%	(38)	-	-	Link Ratio Method		767	20.0%	(5)	-	(5)	(0.1%)
2014 / 2	(84)	-		-				Link Ratio Method	-	898	22.1%	(125)	-	-	Link Ratio Method		898	22.1%		-		
2015 / 1	(38)	-		-				Link Ratio Method	-	860	20.9%	(38)	-	-	Link Ratio Method		860	20.9%	-	-	-	
2015 / 2	(90)	-		(11)				Link Ratio Method	-	975	22.0%	(90)	-	-	Link Ratio Method		975	22.0%	-	-	-	
2016 / 1	16			4				Link Ratio Method	-	877	19.6%	13	0	0	Link Ratio Method		881	19.7%	(4)	-	(4)	(0.1%)
2016 / 2	101	1	1	. 38	-			Link Ratio Method	1	853	17.9%	100	3	3	Link Ratio Method	3	856	18.0%	(1)	(2)	(3)	(0.1%)
2017 / 1	217	5	6	111				Link Ratio Method	5	849	16.8%	155	4	5	Link Ratio Method	4	860	17.0%	(12)	1	(11)	
2017 / 2	(148)	6	6					Link Ratio Method	6	1,643	23.2%	(182)	8	7	BF Method	7	1,682	23.7%	(39)	(1)	(40)	
2018 / 1	(3)		10					BF Method	10	1,798	21.2%	(9)	10	10	BF Method	10	1,812	21.2%	(14)	- '	(14)	
2018 / 2	(184)		14					BF Method	14	2,106	23.2%	(273)	(117)	(108)		(108)	2,087	22.8%	(103)	122	19	
2019 / 1	(== 1)			(===)				_	(225)	1,907	20.4%	857	921	892	-		993	21.4%	967	(53)	914	
Total	(4,308)	38	37	(107)					(189)	26,486		(3,939)	829	810		(256)	25,629		789	67	856	
				, , ,					,,			(-,,										
018 / 2 & Prior	(4.308)	38	37	(107)					36	24,579		(4.796)	(91)	(83)	d .	(84)	24.636		(178)	120	(58)	

^{2018 / 2 &}amp; Prio (4,308) 38 37 (107)

*Earned Premium prior to data modernization (2009 / 2) was not allocated on a coverage level

**Current accident half-year IBNR and Ultimate Loss estimates derived from the CAHY Selections exhibit

Facility Association Valuation Results
Amounts in: \$1,000s as at June 30, 2019

Coverage: Accident Benefits RSP: Nova Scotia

Life to Date													
Accident Year	Earned	Paid Indemnity &	Allowed Claims	Case Res	0.000	Recorded Indem	nity & Allowed	Selected	J IDNID	Ultimate Indemi	nity & Allowed	Unpaid Indemn	ity & Allowed
Accident rear	Premium	Exper	nse	Case Res	serves	Claims Ex	kpense	Selected	I IDINK	Claims E	xpense	Claims E	xpense
	\$000s	\$000s	% EP	\$000s	% EP	\$000s	% EP	\$000s	% EP	\$000s	% EP	\$000s	% EP
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
	database	database	= [3]/[2]	= [7]-[3]	= [5]/[2]	database	= [7]/[2]	database	= [9]/[2]	= [7]+[9]	= [11]/[2]	= [5]+[9]	= [13]/[2]
2014 & prior	9,291	5,175	55.7%	162	1.7%	5,337	57.4%	2	-	5,339	57.5%	164	1.8%
2015	1,445	696	48.2%	627	43.4%	1,323	91.6%	50	3.5%	1,373	95.0%	677	46.9%
2016	1,549	766	49.5%	56	3.6%	822	53.1%	52	3.4%	874	56.4%	108	7.0%
2017	1,955	639	32.7%	721	36.9%	1,360	69.6%	323	16.5%	1,683	86.1%	1,044	53.4%
2018	2,742	709	25.9%	403	14.7%	1,112	40.6%	743	27.1%	1,855	67.7%	1,146	41.8%
2019	1,422	132	9.3%	896	63.0%	1,028	72.3%	62	4.4%	1,090	76.7%	958	67.4%
TOTAL	18,404	8,117	44.1%	2,865	15.6%	10,982	59.7%	1,232	6.7%	12,214	66.4%	4,097	22.3%
2018 & prior	16,982	7,985	47.0%	1,969	11.6%	9,954	58.6%	1,170	6.9%	11,124	65.5%	3,139	18.5%

Activity During	Quarter vs EP												
Accident Year	Earned Premium (LTD)	Change in Paid Allowed Clair	, ,	Change in Cas	e Reserves	Change in Record	, ,	Change in Se	lected IBNR	Change in Ultima Allowed Clair	,	Change in Unpai	,
1	\$000s	\$000s	% EP	\$000s	% EP	\$000s	% EP	\$000s	% EP	\$000s	% EP	\$000s	% EP
[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]
	database	database	=[17]/[16]	database	=[19]/[16]	database	=[21]/[16]	database	=[23]/[16]	database	=[25]/[16]	database	=[27]/[16]
2014 & prior	9,291	5	0.1%	9	0.1%	14	0.2%	1	-	15	0.2%	10	0.1%
2015	1,445	14	1.0%	(14)	(1.0%)	-	-	18	1.2%	18	1.2%	4	0.3%
2016	1,549	28	1.8%	(48)	(3.1%)	(20)	(1.3%)	(17)	(1.1%)	(37)	(2.4%)	(65)	(4.2%)
2017	1,955	31	1.6%	58	3.0%	89	4.6%	(123)	(6.3%)	(34)	(1.7%)	(65)	(3.3%)
2018	2,742	114	4.2%	(199)	(7.3%)	(85)	(3.1%)	(137)	(5.0%)	(222)	(8.1%)	(336)	(12.3%)
TOTAL	16,982	192	1.1%	(194)	(1.1%)	(2)	-	(258)	(1.5%)	(260)	(1.5%)	(452)	(2.7%)

Emergence Dur	ing Quarter							
Accident Year	Beginning IBNR	Beginning Unpaid	0	d Indemnity & ims Expense		ded Indemnity & ims Expense	Change in Ultima	,
!	\$000s	\$000s	\$000s	% Beg Unpaid	\$000s	% Beg IBNR	\$000s	% Beg Unpaid
[29]	[30]	[31]	[32]	[33]	[34]	[35]	[36]	[37]
	database	database	[17]	=[32]/[31]	[21]	=[34]/[30]	[25]	=[36]/[31]
2014 & prior	1	154	5	3.2%	14	1,400.0%	15	9.7%
2015	32	673	14	2.1%	-	-	18	2.7%
2016	69	173	28	16.2%	(20)	(29.0%)	(37)	(21.4%)
2017	446	1,109	31	2.8%	89	20.0%	(34)	(3.1%)
2018	880	1,482	114	7.7%	(85)	(9.7%)	(222)	(15.0%)
TOTAL	1,428	3,591	192	5.3%	(2)	(0.1%)	(260)	(7.2%)

Facility Association Loss Ratios Over Time
Amounts in: \$1,000s as at June 30, 2019

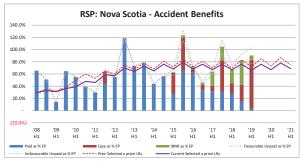
Coverage: Accident Benefits RSP: Nova Scotia

Accident Year [1]	Earned Premium @ Jun 2019 [2]	Paid Claims Amt* @ Jun 2019 [3]	Case Reserve @ Jun 2019 [4]	Recorded Claims Amt* @ Jun 2019 [5]	Selected IBNR @ Jun 2019 [6]	Ultimate Claims Amt* @ Jun 2019 [7]	Selected Ultimate LR @ Jun 2019 [8]	Selected Ultimate LR @ Mar 2019 [9]	Selected Ultimate LR @ Dec 2018 [10]	Selected Ultimate LR @ Sep 2018 [11]	Selected Ultimate LR @ Jun 2018 [12]	Sel Ult LR @ compared Sel Ult LR @ Ultimate LR [13]	with prior	Sel Ult LR @ compared v Sel Ult LR @ Ultimate LR [15]	with prior Jun 2018 Claims Amt* @ curr EP [16]
	database	database	= [5]-[3]	database	database	= [5]+[6]	= [7]/[2]	database	database	database	database	= [8]-[9]		= [8]-[12]	= [2]*[15]
2007	177	51	-	51	-	51			28.8%	28.8%	28.8%	-	-	-	-
2008	959	545	-	545	-	545	56.8%		56.8%	56.8%		-	-	-	-
2009	1,353	558	-	558	-	558	41.2%	41.2%	41.2%	41.2%	41.3%	-	-	(0.1%)	(1)
2010	1,464	692	-	692	-	692	47.3%	47.3%	47.3%	47.3%	47.3%	-	-	-	-
2011	1,301	480	153	633	-	633	48.7%	46.4%	46.4%	46.4%	46.5%	2.3%	29	2.2%	29
2012	1,290	1,148	-	1,148	-	1,148	89.0%	88.9%	88.9%	101.9%	102.2%	0.1%	1	(13.2%)	(170)
2013	1,364	1,017	-	1,017	-	1,017	74.6%	75.7%	75.1%	78.8%	79.4%	(1.1%)	(16)	(4.8%)	(65)
2014	1,383	684	9	693	2	695	50.3%	50.2%	50.3%	51.8%	52.4%	0.1%	1	(2.1%)	(29)
2015	1,445	696	627	1,323	50	1,373	95.0%	93.8%	94.4%	95.2%	99.5%	1.2%	18	(4.5%)	(65)
2016	1,549	766	56	822	52	874	56.4%	58.8%	65.5%	63.8%	73.8%	(2.4%)	(37)	(17.4%)	(270)
2017	1,955	639	721	1,360	323	1,683	86.1%	87.6%	90.2%	88.9%	92.1%	(1.5%)	(34)	(6.0%)	(117)
2018	2,742	709	403	1,112	743	1,855	67.7%	75.4%	75.8%	73.2%	78.0%	(7.7%)	(222)	-	-
2019	1,422	132	896	1,028	62	1,090	76.7%	90.4%	-	-	-	-	-	-	-
TOTAL	18,404	8,117	2,865	10,982	1,232	12,214	66.4%	67.9%	68.0%	68.5%	70.6%		(260)		(688)
2018 & prior	16,982	7,985	1,969	9,954	1,170	11,124	65.5%	67.0%	68.0%	68.5%	70.6%		(260)		(688)

^{*} Claims Amt = indemnity & allowed claims expense (where latter is allowed expense over and above the claims expense included in the expense allowance for member companies)

^{**} Accident year loss ratios are as at the valuation date, for the current accident year, these loss ratios are based on partial year exposure, as such, larger variances may be expected

Accident Period	Current Selected	Prior Selected	Change
2008 / 1	29.0%	30.0%	(1.0%)
2008 / 2	33.0%	35.0%	(2.0%)
2009 / 1	31.0%	32.0%	(1.0%)
2009 / 2	36.0%	38.0%	(2.0%)
2010 / 1	39.0%	50.0%	(11.0%)
2010 / 2	48.0%	60.0%	(12.0%)
2011/1	46.0%	53.0%	(7.0%)
2011/2	59.0%	65.0%	(6.0%)
2012 / 1	57.0%	60.0%	(3.0%)
2012 / 2	70.0%	75.0%	(5.0%)
2013 / 1	64.0%	67.0%	(3.0%)
2013 / 2	73.0%	78.0%	(5.0%)
2014 / 1	65.0%	68.0%	(3.0%)
2014/2	76.0%	81.0%	(5.0%)
2015 / 1	68.0%	72.0%	(4.0%)
2015 / 2	79.0%	84.0%	(5.0%)
2016 / 1	68.0%	72.0%	(4.0%)
2016 / 2	76.0%	81.0%	(5.0%)
2017 / 1	67.0%	70.0%	(3.0%)
2017 / 2	76.0%	81.0%	(5.0%)
2018 / 1	67.0%	70.0%	(3.0%)
2018 / 2	76.0%	83.0%	(7.0%)
2019 / 1	66.0%	72.0%	(6.0%)
2019 / 2	76.0%	85.0%	(9.0%)
2020 / 1	67.0%	73.0%	(6.0%)
2020 / 2	78.0%	87.0%	(9.0%)
2021/1	69.0%	75.0%	(6.0%)

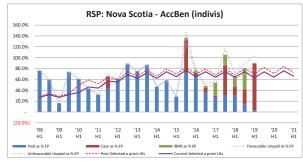


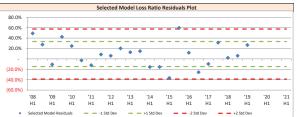
					Selected	Model	Loss Ra	tio Res	iduals Pl	ot				
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	H1	H1	H1	H1	H1	H1	H1	H1	H1	H1	H1	H1	H1	H1
	Selecte	d Model Re	siduals		-1 Std Dev	_	- +1 Str	Dev	4	Std Dev		+2 Std E	ev	

		Mar 31,	, 2019 valuatio	n result			Adjust EP to 20	19 / 1 rate lev	el	Adjust Ultir	nate Claims An	ount to 2019 /	1 clms level		
Accident Period	Actual Earned Premium	Paid Claims Amount	Case Reserves	Selected Ultimate Claims Amount*	Selected Ultimate Loss Ratio	Rate Change	Drift (RG, class, etc.)	Other	EP @ 2019 / 1 rate level	Loss Cost Trend Factor	Reform Adj Factor	Other Factor	Ult. Clms Amt @ 2019 / 1 clms level	On-Level to 2019 / 1 Loss Ratios	Weights
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]
	val data	val data	val data	val data	=[4]/[1]	industry avg EP relativity	assumption	assumption	=[1]*[6]*[7]*[8]	trend analysis	assumption	assumption	=[4]*[10]* [11]*[12]	=[13]/[9]	selected
2008 / 1	395	258	-	258	65.4%	0.9651	1.0000	1.0000	381	2.2935	1.0000	1.0000	592	155.4%	-
2008 / 2	562	287	-	287	51.1%	0.9784	1.0000	1.0000	550	1.9775	1.0000	1.0000	567	103.1%	-
2009 / 1	628	88	-	88	14.1%	0.9843	1.0000	1.0000	619	2.3251	1.0000	1.0000	206	33.3%	-
2009 / 2	725	469	-	469	64.7%	0.9974	1.0000	1.0000	723	1.9942	1.0000	1.0000	936	129.5%	-
2010 / 1	738	408	-	408	55.3%	1.0160	1.0000	1.0000	750	1.8130	1.0000	1.0000	740	98.7%	-
2010 / 2	726	284	-	284	39.1%	1.0424	1.0000	1.0000	757	1.4380	1.0000	1.0000	408	53.9%	-
2011 / 1	672	200	-	200	29.8%	1.0605	1.0000	1.0000	713	1.5419	1.0000	1.0000	309	43.3%	0.6%
2011/2	630	276	128	403	64.0%	1.0918	1.0000	1.0000	688	1.2279	1.0000	1.0000	495	71.9%	0.6%
2012 / 1	601	330	-	330	55.0%	1.1465	1.0000	1.0000	689	1.3375	1.0000	1.0000	442	64.2%	0.6%
2012 / 2	689	817	0	817	118.6%	1.2156	1.0000	1.0000	837	1.1970	1.0000	1.0000	978	116.8%	0.7%
2013 / 1	679	480	16	496	73.0%	1.2391	1.0000	1.0000	842	1.2890	1.0000	1.0000	639	75.9%	0.7%
2013 / 2	684	537	-	537	78.5%	1.2226	1.0000	1.0000	836	1.0828	1.0000	1.0000	581	69.5%	0.6%
2014 / 1	676	296	-	296	43.8%	1.2056	1.0000	1.0000	815	1.2374	1.0000	1.0000	366	44.9%	9.6%
2014/2	707	388	9	398	56.3%	1.2109	1.0000	1.0000	856	1.0518	1.0000	1.0000	419	48.9%	9.6%
2015 / 1	703	196	244	439	62.4%	1.2167	1.0000	1.0000	856	1.1934	1.0000	1.0000	523	61.1%	9.6%
2015 / 2	743	486	397	916	123.3%	1.2010	1.0000	1.0000	892	0.9981	1.0000	1.0000	914	102.5%	9.6%
2016 / 1	745	464	38	540	72.5%	1.1679	1.0000	1.0000	870	1.1396	1.0000	1.0000	616	70.8%	9.6%
2016 / 2	804	274	66	370	46.0%	1.1219	1.0000	1.0000	902	0.9644	1.0000	1.0000	357	39.6%	9.7%
2017 / 1	829	262	74	531	64.0%	1.0991	1.0000	1.0000	911	1.0926	1.0000	1.0000	580	63.7%	9.7%
2017 / 2	1,131	346	588	1,186		1.0756	1.0000	1.0000	1,217	0.9280	1.0000	1.0000	1,101	90.5%	9.7%
2018 / 1	1,344	378	224	912	67.9%	1.0537	1.0000	1.0000	1,416	1.0453	1.0000	1.0000	953	67.3%	9.7%
2018 / 2	1,411	216	379	1,165		1.0278	1.0000	1.0000	1,451	0.8920	1.0000	1.0000	1,039	71.6%	9.7%
Total	16,822	7,741	2,163	11,332	67.4%	1.1038	1.0000	1.0000	18,571	1.2145	1.0000	1.0000	13,761	74.1%	100.4%
			*indemnity & a	Illowed claims	expense	2018-2 AIX				on industry 20	18-2 AIX data	٧.	weighted average	66.6%	
			from FA Valuat	ion Summary						derived from 2	2019 / 1 on-lev	els	selected	66.0%	72.0%
														current	prior

Premium adjustment factors [6]-[8], Claims adjustment factors [10]-[12], and selected experience period weights [15] are selected at the coverage level, implied aggregate factors are presented above

Accident Period	Current Selected	Prior Selected	Change
2008 / 1	27.0%	29.0%	(2.0%)
2008 / 2	32.0%	34.0%	(2.0%)
2009 / 1	27.0%	29.0%	(2.0%)
2009 / 2	32.0%	34.0%	(2.0%)
2010 / 1	36.0%	49.0%	(13.0%)
2010 / 2	46.0%	59.0%	(13.0%)
2011 / 1	44.0%	52.0%	(8.0%)
2011/2	57.0%	64.0%	(7.0%)
2012 / 1	55.0%	59.0%	(4.0%)
2012 / 2	69.0%	74.0%	(5.0%)
2013 / 1	62.0%	66.0%	(4.0%)
2013 / 2	72.0%	77.0%	(5.0%)
2014 / 1	62.0%	66.0%	(4.0%)
2014 / 2	74.0%	79.0%	(5.0%)
2015 / 1	65.0%	70.0%	(5.0%)
2015 / 2	77.0%	82.0%	(5.0%)
2016 / 1	65.0%	70.0%	(5.0%)
2016 / 2	74.0%	79.0%	(5.0%)
2017 / 1	64.0%	68.0%	(4.0%)
2017 / 2	74.0%	79.0%	(5.0%)
2018 / 1	64.0%	68.0%	(4.0%)
2018 / 2	74.0%	80.0%	(6.0%)
2019 / 1	63.0%	70.0%	(7.0%)
2019 / 2	74.0%	82.0%	(8.0%)
2020 / 1	64.0%	71.0%	(7.0%)
2020 / 2	76.0%	84.0%	(8.0%)
2021 / 1	66.0%	73.0%	(7.0%)





		Mar 31,	2019 valuation	result			Adjust EP to 20	19 / 1 rate lev	el .	Adjust Ultim	nate Claims Am	ount to 2019 /	1 clms level		
Accident Period	Actual Earned Premium	Paid Claims Amount	Case Reserves	Selected Ultimate Claims Amount*	Selected Ultimate Loss Ratio	Rate Change	Drift (RG, class, etc.)	Other	EP @ 2019 / 1 rate level	Loss Cost Trend Factor	Reform Adj Factor	Other Factor	Ult. Clms Amt @ 2019 / 1 clms level	On-Level to 2019 / 1 Loss Ratios	Weights
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]
	val data	val data	val data	val data	=[4]/[1]	industry avg EP relativity	assumption	assumption	=[1]*[6]*[7]*[8]	trend analysis	assumption	assumption	=[4]*[10]* [11]*[12]	=[13]/[9]	selected
2008 / 1	339	258	-	258	76.2%	0.9845	1.0000	1.0000	334	2.2935	1.0000	1.0000	592	177.2%	-
2008 / 2	482	286		286	59.4%	0.9976	1.0000	1.0000	481	1.9770	1.0000	1.0000	566	117.7%	
2009 / 1	539	88	-	88	16.4%	1.0030	1.0000	1.0000	541	2.3251	1.0000	1.0000	206	38.1%	-
2009 / 2	624	463	-	463	74.2%	1.0147	1.0000	1.0000	633	2.0004	1.0000	1.0000	926	146.3%	-
2010 / 1	669	406	-	406	60.7%	1.0273	1.0000	1.0000	687	1.8148	1.0000	1.0000	737	107.3%	-
2010 / 2	658	284	-	284	43.1%	1.0535	1.0000	1.0000	693	1.4380	1.0000	1.0000	408	58.9%	-
2011/1	609	194	-	194	31.9%	1.0708	1.0000	1.0000	652	1.5452	1.0000	1.0000	300	46.0%	-
2011/2	570	246	128	373	65.5%	1.1031	1.0000	1.0000	629	1.2137	1.0000	1.0000	453	72.0%	-
2012 / 1	541	330	-	330	61.1%	1.1621	1.0000	1.0000	629	1.3375	1.0000	1.0000	442	70.3%	-
2012 / 2	617	549		549	89.1%	1.2367	1.0000	1.0000	763	1.1263	1.0000	1.0000	619	81.1%	
2013 / 1	608	440	15	455	74.9%	1.2611	1.0000	1.0000	767	1.2869	1.0000	1.0000	586	76.4%	-
2013 / 2	617	537		537	87.0%	1.2402	1.0000	1.0000	765	1.0828	1.0000	1.0000	581	75.9%	-
2014 / 1	612	285	-	285	46.5%	1.2198	1.0000	1.0000	747	1.2368	1.0000	1.0000	352	47.1%	10.0%
2014/2	639	363	9	373	58.4%	1.2258	1.0000	1.0000	783	1.0399	1.0000	1.0000	388	49.6%	10.0%
2015 / 1	634	178	3	179	28.3%	1.2329	1.0000	1.0000	782	1.1875	1.0000	1.0000	213	27.2%	10.0%
2015 / 2	670	486	397	915	136.6%	1.2164	1.0000	1.0000	815	0.9979	1.0000	1.0000	913	112.0%	10.0%
2016 / 1	674	445	38	519	76.9%	1.1806	1.0000	1.0000	796	1.1393	1.0000	1.0000	591	74.2%	10.0%
2016/2	731	264	65	353	48.3%	1.1303	1.0000	1.0000	826	0.9568	1.0000	1.0000	338	40.9%	10.0%
2017 / 1	756	204	22	410	54.3%	1.1051	1.0000	1.0000	835	1.0918	1.0000	1.0000	448	53.7%	10.0%
2017 / 2	1,040	315	568	1,095	105.3%	1.0796	1.0000	1.0000	1,123	0.9161	1.0000	1.0000	1,003	89.3%	10.0%
2018 / 1	1,241	372	208	820	66.1%	1.0566	1.0000	1.0000	1,311	1.0453	1.0000	1.0000	857	65.4%	10.0%
2018 / 2	1,303	189	356	1,043	80.0%	1.0297	1.0000	1.0000	1,342	0.8766	1.0000	1.0000	914	68.1%	10.0%
Total	15,173	7,181	1,810	10,217	67.3%	1.1160	1.0000	1.0000	16,934	1.2169	1.0000	1.0000	12,433	73.4%	100.0%
			*indemnity & a		expense	2018-2 AIX				on industry 20			veighted average		
			from FA Valuat	ion Summary						derived from 2	019 / 1 on-leve	els	selected	63.0%	70.0%

[6] Rate Change factors are current AHY on-level factors estimated using industry projected earned premium data, details are presented in the a priori LR model Rate Change Factors exhibit

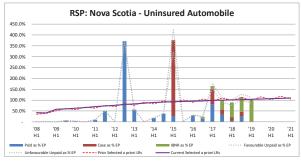
[7],[8] Additional premium adjustment factors not included in Rate Change factors [6], as necessary. If applicable, details are presented in the a priori LR model additional Premium Adjustment Factors exhibit
[10] Loss Cost Trend factors are current AHY on-level modeled loss cost adjustment factors selected as part of the associated FA industry trend analysis using industry indemnity only claims data. These loss cost adjustment factors are not confined to claims trend and include any applicable adjustments for product reform, details are presented in the a priori LR model Claims Trend and Index factors exhibit [11] Reform Adj factors are additional explicit product reform adjustment factors not included in Loss Cost Trend factors [10], as necessary. If applicable, details are presented in the a priori LR model additional Claims Adjustment

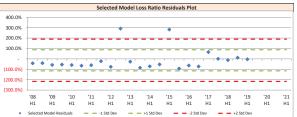
[12] Additional claims adjustment factors not included in Loss Cost Trend factors [10], as necessary. If applicable, details are presented in the a priori LR model additional Claims Adjustment Factors exhibit

current

prior

Accident Period	Current Selected	Prior Selected	Change
2008 / 1	42.0%	35.0%	7.0%
2008 / 2	41.0%	39.0%	2.0%
2009 / 1	58.0%	51.0%	7.0%
2009 / 2	60.0%	61.0%	(1.0%)
2010 / 1	63.0%	56.0%	7.0%
2010 / 2	66.0%	68.0%	(2.0%)
2011/1	70.0%	63.0%	7.0%
2011/2	73.0%	76.0%	(3.0%)
2012 / 1	76.0%	70.0%	6.0%
2012 / 2	80.0%	84.0%	(4.0%)
2013 / 1	83.0%	77.0%	6.0%
2013 / 2	86.0%	91.0%	(5.0%)
2014 / 1	89.0%	83.0%	6.0%
2014 / 2	91.0%	97.0%	(6.0%)
2015 / 1	93.0%	87.0%	6.0%
2015 / 2	94.0%	101.0%	(7.0%)
2016 / 1	95.0%	90.0%	5.0%
2016/2	96.0%	105.0%	(9.0%)
2017 / 1	99.0%	95.0%	4.0%
2017 / 2	100.0%	110.0%	(10.0%)
2018 / 1	101.0%	98.0%	3.0%
2018 / 2	102.0%	113.0%	(11.0%)
2019 / 1	104.0%	100.0%	4.0%
2019 / 2	105.0%	115.0%	(10.0%)
2020 / 1	107.0%	102.0%	5.0%
2020 / 2	108.0%	118.0%	(10.0%)
2021 / 1	110.0%	105.0%	5.0%





		Mar 31,	2019 valuatio	n result			Adjust EP to 20	19 / 1 rate leve	el	Adjust Ultin	nate Claims An	nount to 2019 /	1 clms level		
Accident Period	Actual Earned Premium	Paid Claims Amount	Case Reserves	Selected Ultimate Claims Amount*	Selected Ultimate Loss Ratio	Rate Change	Drift (RG, class, etc.)	Other	EP @ 2019 / 1 rate level	Loss Cost Trend Factor	Reform Adj Factor	Other Factor	Ult. Clms Amt @ 2019 / 1 clms level	On-Level to 2019 / 1 Loss Ratios	Weights
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]
	val data	val data	val data	val data	=[4]/[1]	industry avg EP relativity	assumption	assumption	=[1]*[6]*[7]*[8]	trend analysis	assumption	assumption	=[4]*[10]* [11]*[12]	=[13]/[9]	selected
2008 / 1	56	-	-		-	0.8476	1.0000	1.0000	47	2.1108	1.0000	1.0000	-	-	-
2008 / 2	80	1	-	1	0.8%	0.8630	1.0000	1.0000	69	2.1941	1.0000	1.0000	1	1.4%	-
2009 / 1	89	-	-	-	-	0.8709	1.0000	1.0000	78	1.5731	1.0000	1.0000		-	-
2009 / 2	101	6	-	6	6.2%	0.8906	1.0000	1.0000	90	1.5369	1.0000	1.0000	10	11.1%	-
2010 / 1	69	2	-	2	3.3%	0.9069	1.0000	1.0000	63	1.5023	1.0000	1.0000	3	4.8%	-
2010 / 2	68	-	-	-	-	0.9352	1.0000	1.0000	64	1.4692	1.0000	1.0000	-	-	-
2011/1	63	6	-	6	9.5%	0.9612	1.0000	1.0000	61	1.4344	1.0000	1.0000	9	14.8%	6.3%
2011/2	60	30	-	30	50.1%	0.9845	1.0000	1.0000	59	1.4042	1.0000	1.0000	42	71.2%	6.3%
2012 / 1	60	-	-	-	-	1.0062	1.0000	1.0000	60	1.3724	1.0000	1.0000		-	6.3%
2012 / 2	72	268	0	268	371.8%	1.0345	1.0000	1.0000	74	1.3421	1.0000	1.0000	359	485.1%	6.3%
2013 / 1	71	40	0	40	56.8%	1.0507	1.0000	1.0000	75	1.3130	1.0000	1.0000	53	70.7%	6.3%
2013 / 2	67	-	-	-	-	1.0605	1.0000	1.0000	71	1.2827	1.0000	1.0000	-	-	6.3%
2014 / 1	64	11	-	11	17.5%	1.0694	1.0000	1.0000	68	1.2538	1.0000	1.0000	14	20.6%	6.3%
2014 / 2	68	26	-	26	37.5%	1.0714	1.0000	1.0000	73	1.2261	1.0000	1.0000	31	42.5%	6.3%
2015 / 1	69	18	241	259	375.7%	1.0674	1.0000	1.0000	74	1.1975	1.0000	1.0000	310	418.9%	6.3%
2015 / 2	73	0		1	1.5%	1.0595	1.0000	1.0000	77	1.1722	1.0000	1.0000	1	1.3%	6.3%
2016 / 1	71	19	0	22	30.9%	1.0478	1.0000	1.0000	74	1.1460	1.0000	1.0000	25	33.8%	6.3%
2016 / 2	73	10	1	17	23.7%	1.0383	1.0000	1.0000	76	1.1191	1.0000	1.0000	19	25.0%	6.3%
2017 / 1	73	59	53	120	164.6%	1.0373	1.0000	1.0000	76	1.0952	1.0000	1.0000	132	173.7%	6.3%
2017 / 2	91	31	20	91	100.1%	1.0298	1.0000	1.0000	94	1.0706	1.0000	1.0000	98	104.3%	6.3%
2018 / 1	103	6	15	92	89.1%	1.0188	1.0000	1.0000	105	1.0455	1.0000	1.0000	96	91.4%	6.3%
2018 / 2	108	27	22	123		1.0053	1.0000	1.0000	109	1.0230	1.0000	1.0000		114.7%	6.3%
Total	1,649	560	353	1,115	67.6%	0.9919	1.0000	1.0000	1,637	1.1922	1.0000	1.0000	1,328	81.1%	100.0%
			*indemnity & a from FA Valuat			2018-2 AIX				on industry 20 derived from 2			weighted average selected	104.0%	100.0%
														current	prior

[6] Rate Change factors are current AHY on-level factors estimated using industry projected earned premium data, details are presented in the a priori LR model Rate Change Factors exhibit

[7],[8] Additional premium adjustment factors not included in Rate Change factors [6], as necessary. If applicable, details are presented in the a priori LR model additional Premium Adjustment Factors exhibit
[10] Loss Cost Trend factors are current AHY on-level modeled loss cost adjustment factors selected as part of the associated FA industry trend analysis using industry indemnity only claims data. These loss cost adjustment factors are not confined to claims trend and include any applicable adjustments for product reform, details are presented in the a priori LR model Claims Trend and Index factors exhibit [11] Reform Adj factors are additional explicit product reform adjustment factors not included in Loss Cost Trend factors [10], as necessary. If applicable, details are presented in the a priori LR model additional Claims Adjustment

[12] Additional claims adjustment factors not included in Loss Cost Trend factors [10], as necessary. If applicable, details are presented in the a priori LR model additional Claims Adjustment Factors exhibit

Estimated and Selected Ultimate Losses by Method

as at June 30, 2019
Coverage: Accident Benefits
RSP: Nova Scotia
Amounts in: \$1,000s

		Actual Exp	perience										Ulti	mate Loss Estimates									
Accident Year	Earned Premium	Paid Claims to Date	Case Reserves	Reported to Date	ELR Method*	Link Ratio Method	Implied BF ELR Method weight*	Implied BF Link Ratio Method weight*	BF Method*	ELR Method weight	Link Ratio Method weight	ELR & LR Wtd Method		User Defined User Defined	ELR Method Ult LR*	Link Ratio Method Ult LR	BF Method Ult LR*	ELR & LR Wtd Method Ult LR	Incurred (Zero IBNR) Ult LR	User Defined 1 Ult LR	User Defined 2 Ult LR	Selected Ultimate Claims Amount	Selected Ultimate Loss Ratio
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14] [15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
															=([5]/[1])	=([6]/[1])	=([9]/[1])	=([12]/[1])	=([13]/[1])	=([14]/[1])	=([15]/[1])		=([23]/[1])
2007	177	51	-	51		51						51	51			28.9%		28.9%	28.9%			51	28.9%
2008	959	545	-	545		545						545	545			56.9%		56.9%	56.9%			545	56.9%
2009	1,353	558	-	558		557						557	558			41.1%		41.1%	41.2%			558	41.2%
2010	1,464	692	-	692	632	692	-	100.0%	692			692	692		43.2%	47.3%	47.3%	47.3%	47.3%			692	47.3%
2011	1,301	480	153	633	680	635	0.8%	99.2%	635			635	633		52.3%	48.8%	48.8%	48.8%	48.7%			633	48.7%
2012	1,290	1,148	0	1,148	826	1,148	-	100.0%	1,148			1,148	1,148		64.1%	89.0%	89.0%	89.0%	89.0%			1,148	89.0%
2013	1,364	1,017	0	1,017	938	1,016	(0.2%)	100.2%	1,016			1,016	1,017		68.8%	74.5%	74.5%	74.5%	74.6%			1,017	74.6%
2014	1,383	684	9	693	971	695	0.2%	99.8%	696			695	693		70.2%	50.3%	50.3%	50.3%	50.1%			695	50.3%
2015	1,445	696	628	1,323	1,060	1,373	7.1%	92.9%	1,351			1,330	1,323		73.4%	95.1%	93.5%	92.0%	91.6%			1,373	95.1%
2016	1,549	766	57	822	1,117	868	2.7%	97.3%	875			965	822		72.1%	56.0%	56.5%	62.3%	53.1%			874	56.4%
2017	1,955	639	721	1,360	1,413	1,660	36.8%	63.2%	1,569			1,484	1,360		72.3%	84.9%	80.2%	75.9%	69.6%			1,683	86.1%
2018	2,742	709	403	1,112	1,963	1,278	13.0%	87.0%	1,367			1,853	1,112		71.6%	46.6%	49.9%	67.6%	40.5%			1,855	67.6%
2019	1,422	132	897	1,028	940	994	(53.6%)	153.6%	1,023			-	1,028		66.1%	69.9%	71.9%		72.3%			1,090	76.7%
Total	18,404	8,117	2,867	10,985	10,541	11,514			10,373			10,971	10,985									12,217	

^{*}Earned Premium prior to data modernization (2009 / 2) was not allocated on a coverage level

^{**}For 'off-half' valuation quarters (Mar and Sep), the current accident year (CAY) by method Ultimate Loss estimates ([5] to [22]) are aggregated from a coverage level

Comparison of Estimated Ultimate Losses by Method as at June 30, 2019

Coverage: Accident Benefits RSP: Nova Scotia Amounts in: \$1,000s

					Curren	t Valuation	Results (as at	Jun 2019)						Prior \	Valuation Results (as at Mar	2019)			Cha	nge from Pr	ior Valuatio	
Accident Year	ELR Method*	Link Ratio Method	BF Method*	ELR & LR Wtd Method	Incurred (Zero IBNR)	User Define	ed User Defined 2	Selected IBNR Method**	Selected IBNR	Selected Ultimate	Selected Ultimate LR	ELR Method*	LR Ratio Method	BF Method*	Selected IBNR Method**	Selected IBNR	Selected Ultimate	Selected Ultimate LR	Incurred to Date	Selected IBNR	Selected Ultimate	Selected Ultimate LR
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
																				=([9]-[16])	=([10]-[17])	=([11]-[18])
2007		51		51	51			N/A	-	51	28.9%		51		N/A	-	51	28.9%	-	-	-	-
2008		545		545	545			N/A	-	545	56.9%		545		N/A	-	545	56.9%	-	-	-	-
2009		557		557	558			N/A	-	558	41.2%		557		N/A	-	558	41.2%	-	-	-	-
2010	632	692	692	692	692			N/A	-	692	47.3%	801	692	692	N/A	-	692	47.3%	-	-	-	-
2011	680	635	635	635	633			N/A		633	48.7%	766	604	604	N/A	-	604	46.4%	30	-	30	2.3%
2012	826	1,148	1,148	1,148	1,148			N/A		1,148	89.0%	878	1,147	1,147	N/A	-	1,147	89.0%	1	-	1	
2013	938	1,016	1,016	1,016	1,017			N/A	-	1,017	74.6%	993	1,035	1,035	N/A	-	1,033	75.7%	(15)	-	(15)	(1.1%)
2014	971	695	696	695	693			N/A	2	695	50.3%	1,028	695	695	N/A	1	694	50.2%	-	1	1	0.1%
2015	1,060	1,373	1,351	1,330	1,323			N/A	50	1,373	95.1%	1,126	1,377	1,354	N/A	32	1,355	93.8%	1	18	19	1.3%
2016	1,117	868	875	965	822			N/A	52	874	56.4%	1,190	897	910	N/A	69	911	58.8%	(19)	(17)	(36)	(2.4%)
2017	1,413	1,660	1,569	1,484	1,360			N/A	323	1,683	86.1%	1,505	1,619	1,537	N/A	446	1,717	87.6%	90	(123)	(33)	(1.5%)
2018	1,963	1,278	1,367	1,853	1,112			N/A	743	1,855	67.6%	2,110	1,288	1,326	N/A	880	2,077	75.4%	(86)	(137)	(223)	(7.8%)
2019	940	994	1,023		1,028			N/A	62	1,090	76.7%	1,060	1,021	990	N/A	54	640	90.4%	443	8	451	
Total	10,541	11,514	10,373	10,971	10,985				1,232	12,217		11,456	11,530	10,291		1,482	12,023		445	(250)	195	
			-													-						
2018 & Prior	9 601	10 520	9 350	10 971	9 956				1 170	11 126		10 396	10 510	9 301		1 428	11 384		2	(258)	(256)	

 ^{2018 &}amp; Prior
 9,601
 10,520
 9,350
 10,971
 9,956

 *Earned Premium prior to data modernization (2009 / 2) was not allocated on a coverage level

 **IBNR selected on a coverage level and aggregated to a Government Line (or Total) level

Estimated and Selected Ultimate Losses by Method

as at June 30, 2019
Coverage: AccBen (indivis)
RSP: Nova Scotia
Amounts in: \$1,000s

		Actual Exp	perience										Ulti	mate Loss Est	timates									
Accident Year	Earned Premium	Paid Claims to Date	Case Reserves	Reported to Date	ELR Method*	Link Ratio Method	Implied BF ELR Method weight*	Link Patio	BF Method*	ELR Method weight	Link Ratio Method weight	ELR & LR Wtd Method	Incurred (Zero IBNR)	User Defined 1	Data Correction	ELR Method Ult LR*	Link Ratio Method Ult LR	BF Method Ult LR*	ELR & LR Wtd Method Ult LR*	Incurred (Zero IBNR) Ult LR	User Defined 1 Ult LR	Data Correction Ult LR	Selected Ultimate Claims Amount	Selected Ultimate Loss Ratio*
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
/ .																=([5]/[1])	=([6]/[1])	=([9]/[1])	=([12]/[1])	=([13]/[1])	=([14]/[1])	=([15]/[1])		=([23]/[1])
2007 / 1	6	1		1		1				-	100.0%	1	1										1	
2007 / 2	171	51		51		51				-	100.0%	51	51										51	
2008 / 1	396	258	-	258		258				-	100.0%	258	258										258	
2008 / 2	563	286	-	286		286				-	100.0%	286	286										286	
2009 / 1	611 666	88 463		88 463	212	88 462	(0.00()	400.007	462	-	100.0%	88 462	88 463			22.00/	CO 407	69.5%	69.4%	69.6%			88 463	69.6%
2009 / 2		406		403	213 241	406	(0.2%)	100.2%	463 406	-	100.0%	406	403			32.0%	69.4%						403	60.7%
2010 / 1	669 658	284		284	303	284	-	100.0%	284	-	100.0%	284	284			36.0%	60.7%	60.7%	60.7%	60.7%			284	
2010 / 2		194		194		195		100.0%	196	-	100.0%	195				46.0%	43.1%	43.1%	43.1%	43.1%				43.1%
2011 / 1	609 570				268		0.5%	99.5%		-	100.0%		194			44.0%	32.1%	32.2%	32.1%	32.0%			194	32.0%
2011 / 2 2012 / 1	541	250 330	153	403 330	325 297	403 330	-	100.0% 100.0%	403 330	-	100.0%	403 330	403 330			57.0% 55.0%	70.7% 61.1%	70.7% 61.1%	70.7% 61.1%	70.7% 61.1%			403 330	70.7% 61.1%
2012 / 1	617	549		549	426	550	-	100.0%	550		100.0%	550	549			69.0%	89.0%	89.0%	89.0%	89.0%			549	89.0%
2012 / 2	608	440		440	377	439	(0.2%)	100.0%	439		100.0%	439	440			62.0%	72.2%	72.2%	72.2%	72.3%			440	72.3%
2013 / 2	617	537		537	444	537	(0.2%)	100.2%	537		100.0%	537	537			72.0%	87.0%	87.0%	87.0%	87.0%			537	87.0%
2014 / 1	612	285		285	379	285		100.0%	285		100.0%	285	285			62.0%	46.5%	46.5%	46.5%	46.5%			285	46.5%
2014 / 2	639	363	9	372	473	374	0.5%	99.5%	374		100.0%	374	372			74.0%	58.5%	58.6%	58.5%	58.2%			374	58.5%
2015 / 1	634	178		178	412	178	0.570	100.0%	178		100.0%	178	178			65.0%	28.2%	28.2%	28.2%	28.2%			178	28.2%
2015 / 2	670	498	387	884	516	935	5.4%	94.6%	912	12.5%	87.5%	882	884			77.0%	139.6%	136.2%	131.7%	132.1%			934	139.6%
2016 / 1	674	447	31	478	438	512	6.6%	93.4%	507	25.0%	75.0%	493	478			65.0%	75.9%	75.2%	73.2%	70.9%			507	75.2%
2016 / 2	731	289	25	314	541	325	3.4%	96.6%	333	37.5%	62.5%	406	314			74.0%	44.5%	45.5%	55.6%	43.0%			332	45.5%
2017 / 1	755	206	24	229	483	237	3.4%	96.6%	246	50.0%	50.0%	360	229			64.0%	31.4%	32.5%	47.7%	30.4%			360	47.7%
2017 / 2	1,037	342	565	907	767	1,170	22.5%	77.5%	1,079	62.5%	37.5%	918	907			74.0%	112.8%	104.1%	88.5%	87.4%			1,079	104.0%
2018 / 1	1,236	391	174	565	791	650	13.1%	86.9%	668	75.0%	25.0%	756	565			64.0%	52.6%	54.1%	61.1%	45.7%			756	61.2%
2018 / 2	1,296	263	201	464	959	516	10.1%	89.9%	560	87.5%	12.5%	903	464			74.0%	39.8%	43.3%	69.7%	35.8%			904	69.8%
2019 / 1	1,314	132	864	995	828	920	(8.1%)	108.1%	928	100.0%	-		995			63.0%	70.0%	70.6%					995	75.8%
Total	16,900	7,532	2,431	9,964	9,481	10,392	(0.27.7)		9,678			9,847	9,964					0.0,0					10,997	

^{*}Earned Premium prior to data modernization (2009 / 2) was not allocated on a coverage level

^{**}For 'off-half' valuation quarters (Mar and Sep), the current accident half-year (CAHY) by method Ultimate Loss estimates ([5] to [22]) are based on projected full AHY Earned Premium estimates

Comparison of Estimated IBNR by Method

as at June 30, 2019

Coverage: AccBen (indivis)
RSP: Nova Scotia

Amounts in: \$1,000s

					Curre	nt Valuation F	esults (as at J	un 2019)						Prior '	Valuation Results (as at Mar	2019)			Cha	inge from Pr	ior Valuation	n
Accident Year	ELR Method IBNR*	Link Ratio Method IBNR	BF Method IBNR*	ELR & LR Wtd Method IBNR	Incurred (Zero IBNR) IBNR	User Defined 1 IBNR	User Defined 2 IBNR	Selected IBNR Method	Selected IBNR	Selected Ultimate	Selected Ultimate LR*	ELR Method IBNR*	Link Ratio Method IBNR	BF Method IBNR*	Selected IBNR Method	Selected IBNR	Selected Ultimate	Selected Ultimate LR*	Incurred to Date	Selected IBNR	Selected Ultimate	Selected Ultimate LR*
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
																				=([9]-[16])	=([10]-[17])	=([11]-[18])
2007 / 1		-						Link Ratio Method	-	1					Link Ratio Method	-	1		-	-	-	
2007 / 2		-			-			Link Ratio Method	-	51			-		Link Ratio Method	-	51		-	-	-	
2008 / 1		-			-			Link Ratio Method	-	258			-		Link Ratio Method	-	258		-	-	-	
2008 / 2		-		-				Link Ratio Method	-	286					Link Ratio Method	-	286		-	-	-	
2009 / 1		-			-			Link Ratio Method	-	88			-		Link Ratio Method	-	88		-	-	-	
2009 / 2	(250)	(1)	(0		-			Incurred (Zero IBNR)	-	463	69.6%	(237)		(0)	Incurred (Zero IBNR)	-	463	69.6%	-	-	-	-
2010 / 1	(165)	(0)	(0) (0)	-			Incurred (Zero IBNR)	-	406	60.7%	(78)	(0)	(0)	Incurred (Zero IBNR)	-	406	60.7%	-	-	-	-
2010 / 2	19	(0)	(0) (0)	-			Incurred (Zero IBNR)	-	284	43.1%	104	0	0	Incurred (Zero IBNR)	-	284	43.1%	-	-	-	-
2011/1	73	1	1	. 1				Incurred (Zero IBNR)	-	194	32.0%	122	0	0	Incurred (Zero IBNR)	-	194	32.0%	-	-	-	-
2011/2	(78)	0	0	0				Incurred (Zero IBNR)	-	403	70.7%	(9)	(0)	(0)	Incurred (Zero IBNR)	-	373	65.5%	30	-	30	5.2%
2012 / 1	(33)	0	0	0	-			Incurred (Zero IBNR)	-	330	61.1%	(11)	(0)	(0)	Incurred (Zero IBNR)	-	330	61.1%	-	-	-	
2012 / 2	(124)	0	0	0				Incurred (Zero IBNR)	-	549	89.0%	(93)	(0)	(0)	Incurred (Zero IBNR)	-	549	89.0%	-	-	-	
2013 / 1	(63)	(1)	(1	.) (1)	-			Incurred (Zero IBNR)	-	440	72.3%	(54)	1	1	Incurred (Zero IBNR)	-	455	74.8%	(15)	-	(15)	(2.5%
2013 / 2	(93)	0	0	0				Incurred (Zero IBNR)	-	537	87.0%	(62)	2	2	Incurred (Zero IBNR)	-	537	87.0%	-	-		
2014/1	95	0	0	0				Incurred (Zero IBNR)	-	285	46.5%	119	0	0	Link Ratio Method	-	285	46.5%	-	-		
2014/2	101	2	3	2	-			Link Ratio Method	2	374	58.5%	133	1	2	Link Ratio Method	1	373	58.4%	_	1	1	0.1%
2015 / 1	234	0	0	0	-			Link Ratio Method		178	28.2%	263	(1)	(2)	Link Ratio Method	(1)	179	28.3%	(2)	1	(1)	(0.1%
2015 / 2	(369)	50	28	(2)				Link Ratio Method	50	934	139.6%	(334)			BF Method	32	915	136.6%	2	18	20	
2016 / 1	(40)	34	29		_			BF Method	29	507	75.2%	(11)		36	BF Method	36	519	76.9%	(5)	(7)	(12)	
2016/2	226	11	18		_			BF Method	18	332	45.5%	249	14	24	BF Method	24	353	48.3%	(14)	(6)	(20)	
2017 / 1	254	8	16					ELR & LR Wtd Method	131	360	47.7%	289	12	25	ELR & LR Wtd Method	185	410	54.3%	4	(54)	(50)	
2017 / 2	(139)	263	172					BF Method	172	1,079	104.0%	(61)		212	BF Method	212	1,095	105.2%	24	(40)	(16)	
2018 / 1	226	85	103					ELR & LR Wtd Method	191	756	61.2%	264	72		ELR & LR Wtd Method	240	820	66.1%	(15)	(49)	(64)	
2018 / 2	495	52	97					ELR & LR Wtd Method	440	904	69.8%	497	(20)		ELR & LR Wtd Method	497	1.043	80.0%	(82)	(57)	(139)	
2019 / 1	433		-					LEN & EN WIG WEGIOG		995	75.8%	363	435	404	LEN & EN WIG WEGHOO	-	586		410	(37)	410	
Total	369	504	466						1.033	10.997	. 3.070	1.453	919	790		1.226	10.854	33.070	337	(193)	144	
	303	304	400	. 073					1,033	20,557		1,433	313	750	1	1,220	10,054		337	(155)	244	
018 / 2 & Prior	369	504	466	879	-				1,033	10,001		1,091	483	386		1,226	10,268		(73)	(193)	(266)	

^{*}Earned Premium prior to data modernization (2009 / 2) was not allocated on a coverage level
**Current accident half-year IBNR and Ultimate Loss estimates derived from the CAHY Selections exhibit

2016 / 2

2017 / 1

2017 / 2

2018 / 1

2018 / 2

2019 / 1

73

73

90

102

108

Amounts in: \$1,000s

Estimated and Selected Ultimate Losses by Method

as at June 30, 2019

Coverage: Uninsured Automobile

RSP: Nova Scotia

Actual Experience Ultimate Loss Estimates Implied BF Implied BF ELR & LR Incurred Selected Selected ELR Link Ratio ELR Link Ratio BF User Data Paid Claims ELR Link Ratio ELR & LR Incurred User Defined Ultimate Ultimate Link Ratio Data (Zero Earned Case Reported to Wtd Accident Year FLR Method* BF Method⁴ Method Method Method Method Method Defined 1 Correction Method Method (Zero IBNR) Claims Premium to Date Reserves Date Wtd Metho Correction IBNR) Ult Loss weight weight Ult LR* Ult LR Ult LR* Ult LR Ult LR weight* weight* Ult LR* Amount Ratio* [1] [2] [3] [4] [5] [10] [11] [12] [13] [14] [15] [20] [21] [23] [24] =([6]/[1]) =([9]/[1]) =([14]/[1]) =([15]/[1] =([23]/[1]) 2007 / 1 100.0% 2007 / 2 100.0% 2008 / 1 (1) 100.0% 2008 / 2 (1) 100.0% 2009 / 1 17 100.0% 2009 / 2 59 100.0% 100.0% 60.0% 10.5% 10.5% 10.5% 10.5% 10.5% 2010 / 1 69 44 100.0% 100.0% 63.0% 3.3% 3.3% 2010 / 2 45 100.0% 100.0% 66.0% 9.6% 2011 / 1 100.0% 100.0% 70.0% 9.6% 9.6% 9.6% 9.6% 30 44 2011 / 2 60 30 100.0% 100.0% 30 30 73.0% 50.1% 50.1% 50.1% 50.1% 30 50.1% 46 2012 / 1 60 100.0% 100.0% 76.0% 57 269 269 269 2012 / 2 72 269 269 100.0% 269 100.0% 269 80.0% 374.6% 374.6% 374.6% 374.6% 374.6% 59 2013 / 1 71 40 40 100.0% 40 100.0% 40 40 83.0% 56.8% 56.8% 56.8% 56.8% 40 56.8% 2013 / 2 67 58 100.0% 100.0% 86.0% 2014 / 1 64 11 57 100.0% 100.0% 11 11 89.0% 17.4% 17.4% 17.4% 17.4% 11 17.4% 2014 / 2 100.0% 100.0% 91.0% 37.4% 37.4% 37.4% 37.4% 37.4% 2015 / 1 19 241 260 64 260 100.0% 260 100.0% 260 260 93.0% 379.0% 379.0% 379.0% 379.0% 260 379.0% 2015 / 2 73 68 100.0% 12.5% 87.5% 94.0% 0.2% 0.2% 0 0.2% 11.9% 0.2% 68 3.2% 95.0% 19 19 96.8% 32 19 27.3% 21 29.2% 2016 / 1 71 19 0 21 25.0% 75.0% 29.5% 44.2% 26.4%

62.5%

50.0%

37.5%

25.0%

12.5%

34

97

90

104

1,124

108

11

132

92

38

44

1,021

96.0%

99.0%

100.0%

101.0%

102.0%

104.0%

16.2%

197.6%

121.3%

48.0%

58.9%

68.3%

19.8%

189 4%

118.0%

59.7%

71.8%

88.0%

46.1%

148 3%

108.0%

87.7%

96.6%

15.4%

181 2%

102.5%

37.4%

41.3%

14 19.5%

138 189 5%

106 118.0%

90 88.2%

104 97.0%

1,220

87.9%

73

60

11

17

11

132

92

38

44

70

72

90

103

110

112

10

59

32

27

27

12 4.6%

143

110

63 30.0%

8 3%

15.5%

22.1%

55.3%

95.4%

91 7%

84.5%

77.9%

70.0%

15 37.5%

137 50.0%

107 62.5%

1,164

61 75.0%

87.5%

100.0%

Total 1,504 585 436 1,021 1,309 1,122
*Earned Premium prior to data modernization (2009 / 2) was not allocated on a coverage level

^{**}For 'off-half' valuation quarters (Mar and Sep), the current accident half-year (CAHY) by method Ultimate Loss estimates ([5] to [22]) are based on projected full AHY Earned Premium estimates

Comparison of Estimated IBNR by Method

as at June 30, 2019

Coverage: Uninsured Automobile RSP: Nova Scotia

Amounts in: \$1,000s

					Currer	nt Valuation	Results (as at	Jun 2019)						Prior '	/aluation Results (as at Mai	2019)			Ch	ange from Pr	rior Valuatio	n
Accident Year	ELR Method IBNR*	Link Ratio Method IBNR	BF Method IBNR*	ELR & LR Wtd Method IBNR	Incurred (Zero IBNR) IBNR	User Define 1 IBNR	d User Defined 2 IBNR	Selected IBNR Method	Selected IBNR	Selected Ultimate	Selected Ultimate LR*	ELR Method IBNR*	Link Ratio Method IBNR	BF Method IBNR*	Selected IBNR Method	Selected IBNR	Selected Ultimate	Selected Ultimate LR*	Incurred to Date	Selected IBNR	Selected Ultimate	Selected Ultimate LR*
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
																				=([9]-[16])	=([10]-[17])	=([11]-[18])
2007 / 1		-			-			Link Ratio Method	-	-					Link Ratio Method	-	-		-	-	-	
2007 / 2		-			-			Link Ratio Method	-	-					Link Ratio Method	-	-		-	-	-	
2008 / 1		-			-			Link Ratio Method	-	· .					Link Ratio Method	-	٠.		-	-	-	
2008 / 2		-			-			Link Ratio Method	-	1					Link Ratio Method	-	1		-	-	-	
2009 / 1		-			-			Link Ratio Method	-						Link Ratio Method	-			-	-	-	
2009 / 2	29			-	-			Link Ratio Method	-	6	10.5%	30	-	-	Link Ratio Method	-	6	10.5%	-	-	-	-
2010 / 1	41		-	-	-			Link Ratio Method	-	2	3.3%	37	-	-	Link Ratio Method	-	2	3.3%	-	-	-	-
2010 / 2	45		-	-	-			Link Ratio Method	-	-		46	-	-	Link Ratio Method	-	-		-	-	-	-
2011 / 1	38		-	-	-			Link Ratio Method	-	6	9.6%	33	-	-	Link Ratio Method	-	6	9.6%	-	-	-	-
2011 / 2	14		-	-	-			Link Ratio Method	-	30	50.1%	16	-	-	Link Ratio Method	-	30	50.1%	-	-	-	-
2012 / 1	46			-	-			Link Ratio Method	-	-	-	42	-	-	Link Ratio Method	-	-	-	-	-	-	-
2012 / 2	(211)			-	-			Link Ratio Method	-	269	374.6%	(207)) -	-	Link Ratio Method	-	268	373.3%	1	-	1	1.3%
2013 / 1	19		-	-	-			Link Ratio Method	-	40	56.8%	14	-	-	Link Ratio Method	-	40	56.8%	-	-	-	-
2013 / 2	58		-	-	-			Link Ratio Method	-	-	-	61	-	-	Link Ratio Method	-	-	-	-	-	-	-
2014 / 1	46		-	-	-			Link Ratio Method	-	11	17.4%	42	-	-	Link Ratio Method	-	11	17.4%	-	-	-	-
2014 / 2	37		-	-	-			Link Ratio Method	-	26	37.4%	41	-	-	Link Ratio Method	-	26	37.4%	-	-	-	-
2015 / 1	(196)		-	-	-			Link Ratio Method	-	260	379.0%	(199)		-	Link Ratio Method	-	259	377.4%	1	-	1	1.6%
2015 / 2	68	-	-	9	-			Link Ratio Method	-	0	0.2%	73	0	1	BF Method	1	1	1.6%	-	(1)		(1.4%)
2016 / 1	49	1	- 2	2 13	-			BF Method	2	21	29.2%	45	1	3	BF Method	3	22	30.8%	-	(1)	(1)	(1.6%)
2016 / 2	59	1	:	3 23	-			BF Method	3	14	19.5%	66	1	6	BF Method	6	17	23.6%	-	(3)		(4.1%)
2017 / 1	(60)	12	6	5 (24)	-			BF Method	6	138	189.5%	(42)	17	9	BF Method	9	120	165.4%	20	(3)		24.1%
2017 / 2	(2)	17	14	1 5	-			BF Method	14	106	118.0%	48	13	20	ELR & LR Wtd Method	40	91	100.6%	41	(26)	15	17.4%
2018 / 1	65	11	23	52	-			ELR & LR Wtd Method	52	90	88.2%	79	8	28	ELR & LR Wtd Method	70	92	89.3%	16	(18)	(2)	(1.1%)
2018 / 2	65	19	33	8 60	-			ELR & LR Wtd Method	60	104	97.0%	73	31	47	ELR & LR Wtd Method	73	123	113.2%	(5)	(13)	(18)	(16.2%)
2019 / 1	-	-		-				-	62	95	87.9%	112	-			54	54	100.0%	33	8	41	(12.1%)
Total	209	60	81	136					199	1,220		409	71	114		256	1,169		107	(57)	50	
2018 / 2 & Prio	209	60		l 136				1		1.125		297		114		202						
U10 / 4 & PTI0	209	60	81	136	-			1	137			297	71	114	l	202	1,115		74	(65)	9	

^{*}Earned Premium prior to data modernization (2009 / 2) was not allocated on a coverage level
**Current accident half-year IBNR and Ultimate Loss estimates derived from the CAHY Selections exhibit

Facility Association Valuation Results
Amounts in: \$1,000s as at June 30, 2019

Coverage: Other Coverages RSP: Nova Scotia

Life to Date													
Assidant Vaar	Earned	Paid Indemnity &	Allowed Claims	Case Res		Recorded Indem	nity & Allowed	Selected	LIDNID	Ultimate Indem	nity & Allowed	Unpaid Indemi	nity & Allowed
Accident Year	Premium	Exper	nse	Case Res	serves	Claims E	xpense	Selected	IIDINK	Claims E	xpense	Claims E	xpense
	\$000s	\$000s	% EP	\$000s	% EP	\$000s	% EP	\$000s	% EP	\$000s	% EP	\$000s	% EP
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
i	database	database	= [3]/[2]	= [7]-[3]	= [5]/[2]	database	= [7]/[2]	database	= [9]/[2]	= [7]+[9]	= [11]/[2]	= [5]+[9]	= [13]/[2]
2014 & prior	25,989	18,240	70.2%	-	-	18,240	70.2%	-	-	18,240	70.2%	-	-
2015	4,047	2,459	60.8%	-	-	2,459	60.8%	2	-	2,461	60.8%	2	-
2016	4,062	2,396	59.0%	-	-	2,396	59.0%	10	0.2%	2,406	59.2%	10	0.2%
2017	4,869	3,472	71.3%	19	0.4%	3,491	71.7%	22	0.5%	3,513	72.2%	41	0.8%
2018	7,259	6,018	82.9%	83	1.1%	6,101	84.0%	(18)	(0.2%)	6,083	83.8%	65	0.9%
2019	3,926	2,724	69.4%	643	16.4%	3,367	85.8%	(98)	(2.5%)	3,269	83.3%	545	13.9%
TOTAL	50,152	35,309	70.4%	745	1.5%	36,054	71.9%	(82)	(0.2%)	35,972	71.7%	663	1.3%
2018 & prior	46,226	32,585	70.5%	102	0.2%	32,687	70.7%	16	-	32,703	70.7%	118	0.3%

Activity During (Quarter vs EP												
Accident Year	Earned Premium (LTD)	Change in Paid Allowed Clair	, ,	Change in Cas	e Reserves	Change in Record	, ,	Change in Se	lected IBNR	Change in Ultima Allowed Clair	,	Change in Unpai	,
	\$000s	\$000s	% EP	\$000s	% EP	\$000s	% EP	\$000s	% EP	\$000s	% EP	\$000s	% EP
[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]	[25]	[26]	[27]	[28]
	database	database	=[17]/[16]	database	=[19]/[16]	database	=[21]/[16]	database	=[23]/[16]	database	=[25]/[16]	database	=[27]/[16]
2014 & prior	25,989	-	-	-	-	-	-	(1)	-	(1)	-	(1)	-
2015	4,047	-	- j	-	-	-	-	(3)	(0.1%)	(3)	(0.1%)	(3)	(0.1%)
2016	4,062	-	-	-	-	-	-	(9)	(0.2%)	(9)	(0.2%)	(9)	(0.2%)
2017	4,869	10	0.2%	(19)	(0.4%)	(9)	(0.2%)	(3)	(0.1%)	(12)	(0.2%)	(22)	(0.5%)
2018	7,259	8	0.1%	(111)	(1.5%)	(103)	(1.4%)	53	0.7%	(50)	(0.7%)	(58)	(0.8%)
TOTAL	46,226	18	-	(130)	(0.3%)	(112)	(0.2%)	37	0.1%	(75)	(0.2%)	(93)	(0.2%)

Emergence Dur	ing Quarter							
Accident Year	Beginning IBNR	Beginning Unpaid	Change in Pai	,	Change in Record	,	Change in Ultima Allowed Clai	,
!	\$000s	\$000s	\$000s	% Beg Unpaid	\$000s	% Beg IBNR	\$000s	% Beg Unpaid
[29]	[30]	[31]	[32]	[33]	[34]	[35]	[36]	[37]
	database	database	[17]	=[32]/[31]	[21]	=[34]/[30]	[25]	=[36]/[31]
2014 & prior	1	1	-	-	-	-	(1)	(100.0%)
2015	5	5	-	-	-	-	(3)	(60.0%)
2016	19	19	-	-	-	-	(9)	(47.4%)
2017	25	63	10	15.9%	(9)	(36.0%)	(12)	(19.0%)
2018	(71)	123	8	6.5%	(103)	145.1%	(50)	(40.7%)
TOTAL	(21)	211	18	8.5%	(112)	533.3%	(75)	(35.5%)

Facility Association Loss Ratios Over Time
Amounts in: \$1,000s as at June 30, 2019

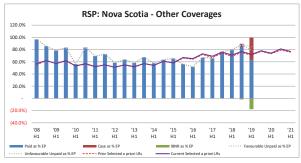
Coverage: Other Coverages RSP: Nova Scotia

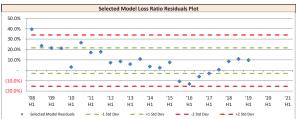
	Earned	Paid	Case	Recorded	Selected	Ultimate	Selected	Selected	Selected	Selected	Selected	Sel Ult LR @ compared Sel Ult LR @	with prior	Sel Ult LR @ compared v Sel Ult LR @	with prior Jun 2018
Accident	Premium	Claims Amt*	Reserve	Claims Amt*	IBNR	Claims Amt*	Ultimate LR				Claims Amt*				
Year	@ Jun 2019	@ Jun 2019	@ Jun 2019	@ Jun 2019	@ Jun 2019	@ Jun 2019	@ Jun 2019	@ Mar 2019	@ Dec 2018	@ Sep 2018	@ Jun 2018	Ultimate LR	Claims Amt*	Ultimate LR	@ curr EP
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]
	database	database	= [5]-[3]	database	database	= [5]+[6]	= [7]/[2]	database	database	database	database	= [8]-[9]		= [8]-[12]	= [2]*[15]
2007	506	469	-	469	-	469	92.7%	92.7%	92.7%	92.7%	92.7%	-	-	-	-
2008	2,679	2,416	-	2,416	-	2,416	i	90.2%	90.2%	90.2%	90.2%	-	-	-	-
2009	3,581	2,897	-	2,897	-	2,897	80.9%	80.9%	80.9%	80.9%	80.9%	-	-	-	-
2010	3,768	2,621	-	2,621	-	2,621	69.6%	69.6%	69.6%	69.6%	69.6%	-	-	-	-
2011	3,505	2,489	-	2,489	-	2,489	71.0%	71.0%	71.0%	71.0%	71.0%	-	-	-	-
2012	3,963	2,421	-	2,421	-	2,421	61.1%	61.1%	61.1%	61.1%	61.1%	-	-	-	-
2013	4,101	2,576	-	2,576	-	2,576	62.8%	62.8%	62.8%	62.8%	62.8%	-	-	-	-
2014	3,886	2,351	-	2,351	-	2,351	60.5%	60.5%	60.5%	60.6%	61.0%	-	(1)	(0.5%)	(19)
2015	4,047	2,459	-	2,459	2	2,461	60.8%	60.9%	60.9%	61.1%	63.4%	(0.1%)	(3)	(2.6%)	(105)
2016	4,062	2,396	-	2,396	10	2,406	59.2%	59.5%	59.4%	59.6%	62.9%	(0.3%)	(9)	(3.7%)	(150)
2017	4,869	3,472	19	3,491	22	3,513	72.2%	72.2%	72.4%	72.5%	76.1%	-	(12)	(3.9%)	(190)
2018	7,259	6,018	83	6,101	(18)	6,083	83.8%	83.9%	76.2%	76.0%	71.8%	(0.1%)	(50)	-	-
2019	3,926	2,724	643	3,367	(98)	3,269	83.3%	81.9%	-	-	-	-	-	-	-
TOTAL	50,152	35,309	745	36,054	(82)	35,972	71.7%	71.3%	69.6%	69.3%	69.7%		(75)		(464)
							<u> </u>			<u> </u>					
2018 & prior	46,226	32,585	102	32,687	16	32,703	70.7%	70.8%	69.6%	69.3%	69.7%		(75)		(464)

^{*} Claims Amt = indemnity & allowed claims expense (where latter is allowed expense over and above the claims expense included in the expense allowance for member companies)

^{**} Accident year loss ratios are as at the valuation date, for the current accident year, these loss ratios are based on partial year exposure, as such, larger variances may be expected

Accident Period	Current Selected	Prior Selected	Change		
2008 / 1	57.0%	55.0%	2.0%		
2008 / 2	62.0%	62.0%	-		
2009 / 1	57.0%	57.0%	-		
2009 / 2	62.0%	61.0%	1.0%		
2010 / 1	53.0%	53.0%	-		
2010 / 2	57.0%	56.0%	1.0%		
2011/1	52.0%	52.0%	-		
2011/2	55.0%	55.0%	-		
2012 / 1	51.0%	51.0%	-		
2012 / 2	55.0%	55.0%	-		
2013 / 1	52.0%	51.0%	1.0%		
2013 / 2	57.0%	57.0%	-		
2014 / 1	54.0%	54.0%	-		
2014/2	61.0%	61.0%	-		
2015 / 1	58.0%	58.0%	-		
2015 / 2	67.0%	66.0%	1.0%		
2016 / 1	65.0%	64.0%	1.0%		
2016/2	73.0%	72.0%	1.0%		
2017 / 1	69.0%	67.0%	2.0%		
2017 / 2	76.0%	74.0%	2.0%		
2018 / 1	71.0%	69.0%	2.0%		
2018 / 2	77.0%	75.0%	2.0%		
2019 / 1	72.0%	71.0%	1.0%		
2019 / 2	78.0%	77.0%	1.0%		
2020 / 1	74.0%	73.0%	1.0%		
2020 / 2	81.0%	79.0%	2.0%		
2021 / 1	77.0%	76.0%	1.0%		





		Mar 31, 2019 valuation result					Adjust EP to 2019 / 1 rate level				Adjust Ultimate Claims Amount to 2019 / 1 clms level				
Accident Period	Actual Earned Premium	Paid Claims Amount	Case Reserves	Selected Ultimate Claims Amount*	Selected Ultimate Loss Ratio	Rate Change	Drift (RG, class, etc.)	Other	EP @ 2019 / 1 rate level	Loss Cost Trend Factor	Reform Adj Factor	Other Factor	Ult. Clms Amt @ 2019 / 1 clms level	On-Level to 2019 / 1 Loss Ratios	Weights
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]
	val data	val data	val data	val data	=[4]/[1]	industry avg EP relativity	assumption	assumption	=[1]*[6]*[7]*[8]	trend analysis	assumption	assumption	=[4]*[10]* [11]*[12]	=[13]/[9]	selected
2008 / 1	1,129	1,089	-	1,089	96.5%	1.1322	1.0000	1.0000	1,279	1.4192	1.0000	1.0000	1,546	120.9%	-
2008 / 2	1,550	1,327	-	1,327	85.6%	1.1335	1.0000	1.0000	1,757	1.3143	1.0000	1.0000	1,744	99.3%	-
2009 / 1	1,707	1,339	-	1,339	78.4%	1.1258	1.0000	1.0000	1,922	1.3960	1.0000	1.0000	1,868	97.2%	-
2009 / 2	1,873	1,559	-	1,559	83.2%	1.1052	1.0000	1.0000	2,070	1.2916	1.0000	1.0000	2,013	97.2%	-
2010 / 1	1,916	1,075	-	1,075	56.1%	1.0701	1.0000	1.0000	2,051	1.4500	1.0000	1.0000	1,558	76.0%	-
2010 / 2	1,852	1,546	-	1,546	83.5%	1.0463	1.0000	1.0000	1,937	1.3299	1.0000	1.0000	2,056	106.1%	-
2011/1	1,732	1,198	-	1,198	69.2%	1.0220	1.0000	1.0000	1,771	1.4115	1.0000	1.0000	1,692	95.5%	-
2011/2	1,772	1,291	-	1,291	72.8%	0.9946	1.0000	1.0000	1,763	1.3038	1.0000	1.0000	1,683	95.5%	-
2012 / 1	1,842	1,073	-	1,073	58.3%	0.9809	1.0000	1.0000	1,807	1.3915	1.0000	1.0000	1,493	82.6%	-
2012 / 2	2,121	1,348	-	1,348	63.6%	0.9779	1.0000	1.0000	2,074	1.2785	1.0000	1.0000	1,724	83.1%	-
2013 / 1	2,103	1,220	-	1,220	58.0%	0.9760	1.0000	1.0000	2,052	1.3563	1.0000	1.0000	1,655	80.7%	-
2013 / 2	1,998	1,356	0	1,356	67.8%	0.9919	1.0000	1.0000	1,982	1.2499	1.0000	1.0000	1,695	85.5%	-
2014 / 1	1,904	1,096	-	1,096	57.6%	1.0087	1.0000	1.0000	1,921	1.3391	1.0000	1.0000	1,468	76.4%	2.9%
2014/2	1,982	1,255	0	1,256	63.4%	1.0364	1.0000	1.0000	2,054	1.2009	1.0000	1.0000	1,508	73.4%	3.0%
2015 / 1	1,993	1,304	-	1,306	65.6%	1.0534	1.0000	1.0000	2,100	1.2944	1.0000	1.0000	1,691	80.5%	3.0%
2015 / 2	2,054	1,154	0	1,158	56.4%	1.0745	1.0000	1.0000	2,208	1.1623	1.0000	1.0000	1,346	61.0%	3.1%
2016 / 1	2,021	1,039	-	1,047	51.8%	1.0908	1.0000	1.0000	2,205	1.2102	1.0000	1.0000	1,267	57.5%	14.6%
2016/2	2,041	1,357	0	1,368	67.0%	1.0954	1.0000	1.0000	2,235	1.0819	1.0000	1.0000	1,481	66.3%	14.5%
2017 / 1	2,055	1,341	5	1,357	66.0%	1.0883	1.0000	1.0000	2,237	1.1377	1.0000	1.0000	1,543	69.0%	14.6%
2017 / 2	2,829	2,122	32	2,168	76.6%	1.0786	1.0000	1.0000	3,051	1.0215	1.0000	1.0000	2,214	72.6%	14.8%
2018 / 1	3,497	2,765	22	2,785	79.6%	1.0623	1.0000	1.0000	3,714	1.0675	1.0000	1.0000	2,973	80.0%	15.0%
2018 / 2	3,812	3,246	171	3,348	87.8%	1.0325	1.0000	1.0000	3,936	0.9651	1.0000	1.0000	3,231	82.1%	15.0%
Total	45,783	32,099	231	32,309	70.6%	1.0511	1.0000	1.0000	48,126	1.2210	1.0000	1.0000	39,449	82.0%	100.4%
			llowed claims	expense	2018-2 AIX				on industry 20			weighted average			
			from FA Valuat	ion Summary						derived from 2	2019 / 1 on-lev	els	selected	72.0%	71.0%

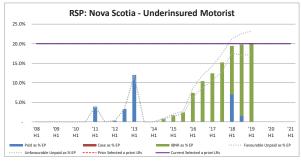
Premium adjustment factors [6]-[8], Claims adjustment factors [10]-[12], and selected experience period weights [15] are selected at the coverage level, implied aggregate factors are presented above

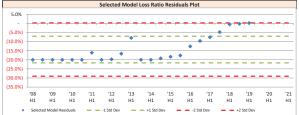
current

prior

Current AHY: 2019 / 1

Accident Period	Current Selected	Prior Selected	Change
2008 / 1	20.0%	20.0%	
2008 / 2	20.0%	20.0%	
2009 / 1	20.0%	20.0%	-
2009 / 2	20.0%	20.0%	
2010 / 1	20.0%	20.0%	-
2010 / 2	20.0%	20.0%	
2011/1	20.0%	20.0%	-
2011/2	20.0%	20.0%	
2012 / 1	20.0%	20.0%	-
2012 / 2	20.0%	20.0%	-
2013 / 1	20.0%	20.0%	-
2013 / 2	20.0%	20.0%	-
2014 / 1	20.0%	20.0%	-
2014/2	20.0%	20.0%	-
2015 / 1	20.0%	20.0%	-
2015 / 2	20.0%	20.0%	
2016 / 1	20.0%	20.0%	-
2016 / 2	20.0%	20.0%	-
2017 / 1	20.0%	20.0%	
2017 / 2	20.0%	20.0%	-
2018 / 1	20.0%	20.0%	-
2018 / 2	20.0%	20.0%	
2019 / 1	20.0%	20.0%	-
2019 / 2	20.0%	20.0%	
2020 / 1	20.0%	20.0%	
2020 / 2	20.0%	20.0%	-
2021/1	20.0%	20.0%	





		Mar 31,	2019 valuatio	n result			Adjust EP to 20	19 / 1 rate lev	el	Adjust Ultin	nate Claims Am	ount to 2019 /	1 clms level		
Accident Period	Actual Earned Premium	Paid Claims Amount	Case Reserves	Selected Ultimate Claims Amount*	Selected Ultimate Loss Ratio	Rate Change	Drift (RG, class, etc.)	Other	EP @ 2019 / 1 rate level	Loss Cost Trend Factor	Reform Adj Factor	Other Factor	Ult. Clms Amt @ 2019 / 1 clms level	On-Level to 2019 / 1 Loss Ratios	Weights
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]
	val data	val data	val data	val data	=[4]/[1]	industry avg EP relativity	assumption	assumption	=[1]*[6]*[7]*[8]	trend analysis	assumption	assumption	=[4]*[10]* [11]*[12]	=[13]/[9]	selected
2008 / 1	76	-	-	-	-	1.0236	1.0000	1.0000	78	1.0000	1.0000	1.0000	-	-	
2008 / 2	104		-			1.0246	1.0000	1.0000	107	1.0000	1.0000	1.0000			
2009 / 1	112	-	-	-	-	1.0303	1.0000	1.0000	115	1.0000	1.0000	1.0000	-	-	
2009 / 2	121		-			1.0329	1.0000	1.0000	125	1.0000	1.0000	1.0000			
2010 / 1	118	-	-	-	-	1.0345	1.0000	1.0000	122	1.0000	1.0000	1.0000	-	-	
2010 / 2	114	-	-	-	-	1.0382	1.0000	1.0000	118	1.0000	1.0000	1.0000	-	-	
2011 / 1	103	4	-	4	3.9%	1.0366	1.0000	1.0000	107	1.0000	1.0000	1.0000	4	3.7%	-
2011/2	97	-	-	-	-	1.0371	1.0000	1.0000	101	1.0000	1.0000	1.0000	-	-	
2012 / 1	98	0	-	0		1.0382	1.0000	1.0000	102	1.0000	1.0000	1.0000	-	-	
2012 / 2	121	4	-	4	0.0	1.0277	1.0000	1.0000	124	1.0000	1.0000	1.0000	4	3.2%	
2013 / 1	120	14	-	14	12.0%	1.0164	1.0000	1.0000	122	1.0000	1.0000	1.0000	14	11.5%	
2013 / 2	114	-	-	-	-	1.0084	1.0000	1.0000	115	1.0000	1.0000	1.0000	-	-	-
2014 / 1	110	-	-	-		1.0099	1.0000	1.0000	111	1.0000	1.0000	1.0000	-	-	10.0%
2014 / 2	118	-	-	1		1.0180	1.0000	1.0000	120	1.0000	1.0000	1.0000	1	0.8%	10.0%
2015 / 1	119	-	-	2		1.0139	1.0000	1.0000	121	1.0000	1.0000	1.0000	2	1.7%	10.0%
2015 / 2	124	-	-	3		1.0129	1.0000	1.0000	126	1.0000	1.0000	1.0000	3	2.4%	10.0%
2016 / 1	122	-	-	9		1.0134	1.0000	1.0000	124	1.0000	1.0000	1.0000	9	7.3%	10.0%
2016 / 2	125	-	-	13		1.0104	1.0000	1.0000	126	1.0000	1.0000	1.0000	13	10.3%	10.0%
2017 / 1	121		-	15		1.0094	1.0000	1.0000	122	1.0000	1.0000	1.0000	15	12.3%	10.0%
2017 / 2	145		-	22		1.0049	1.0000	1.0000	146	1.0000	1.0000	1.0000	22	15.1%	10.0%
2018 / 1	162	12	-	32		1.0025	1.0000	1.0000	162	1.0000	1.0000	1.0000	32	19.8%	10.0%
2018 / 2	170	3	-	34		1.0020	1.0000	1.0000	170	1.0000	1.0000	1.0000	34	20.0%	10.0%
Total	2,614	37	-	153		1.0190	1.0000	1.0000	2,664	1.0000	1.0000	1.0000	153	5.7%	100.0%
			*indemnity &			2018-2 AIX				on industry 20			weighted average		
			from FA Valua	tion Summary						derived from 2	019 / 1 on-lev	els	selected	20.0%	20.0%

[6] Rate Change factors are current AHY on-level factors estimated using industry projected earned premium data, details are presented in the a priori LR model Rate Change Factors exhibit

[7],[8] Additional premium adjustment factors not included in Rate Change factors [6], as necessary. If applicable, details are presented in the a priori LR model additional Premium Adjustment Factors exhibit
[10] Loss Cost Trend factors are current AHY on-level modeled loss cost adjustment factors selected as part of the associated FA industry trend analysis using industry indemnity only claims data. These loss cost adjustment factors are not confined to claims trend and include any applicable adjustments for product reform, details are presented in the a priori LR model Claims Trend and Index factors exhibit [11] Reform Adj factors are additional explicit product reform adjustment factors not included in Loss Cost Trend factors [10], as necessary. If applicable, details are presented in the a priori LR model additional Claims Adjustment

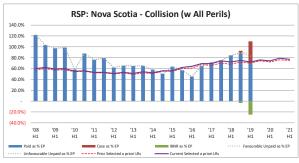
[12] Additional claims adjustment factors not included in Loss Cost Trend factors [10], as necessary. If applicable, details are presented in the a priori LR model additional Claims Adjustment Factors exhibit

current

prior

Current AHY: 2019 / 1

Accident Period	Current Selected	Prior Selected	Change
2008 / 1	60.0%	57.0%	3.0%
2008 / 2	62.0%	60.0%	2.0%
2009 / 1	59.0%	57.0%	2.0%
2009 / 2	60.0%	58.0%	2.0%
2010 / 1	55.0%	54.0%	1.0%
2010 / 2	56.0%	55.0%	1.0%
2011 / 1	53.0%	52.0%	1.0%
2011/2	53.0%	52.0%	1.0%
2012 / 1	51.0%	50.0%	1.0%
2012 / 2	53.0%	52.0%	1.0%
2013 / 1	51.0%	49.0%	2.0%
2013 / 2	54.0%	52.0%	2.0%
2014 / 1	52.0%	51.0%	1.0%
2014 / 2	56.0%	55.0%	1.0%
2015 / 1	56.0%	55.0%	1.0%
2015 / 2	62.0%	60.0%	2.0%
2016 / 1	64.0%	61.0%	3.0%
2016 / 2	69.0%	67.0%	2.0%
2017 / 1	69.0%	66.0%	3.0%
2017 / 2	74.0%	70.0%	4.0%
2018 / 1	72.0%	68.0%	4.0%
2018 / 2	75.0%	72.0%	3.0%
2019 / 1	72.0%	70.0%	2.0%
2019 / 2	76.0%	74.0%	2.0%
2020 / 1	74.0%	72.0%	2.0%
2020 / 2	79.0%	76.0%	3.0%
2021 / 1	77.0%	75.0%	2.0%



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	H1	H1	H1	H1	H1	H1	H1	H1	H1	H1	H1	H1	H1	H1
		ed Model R			-1 Std Dev		- +1 Std E		2 St			2 Std Dev		

		Mar 31,	, 2019 valuatio	n result			Adjust EP to 20	19 / 1 rate lev	el	Adjust Ultin	nate Claims Am	ount to 2019 /	1 clms level		
Accident Period	Actual Earned Premium	Paid Claims Amount	Case Reserves	Selected Ultimate Claims Amount*	Selected Ultimate Loss Ratio	Rate Change	Drift (RG, class, etc.)	Other	EP @ 2019 / 1 rate level	Loss Cost Trend Factor	Reform Adj Factor	Other Factor	Ult. Clms Amt @ 2019 / 1 clms level	On-Level to 2019 / 1 Loss Ratios	Weights
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]
	val data	val data	val data	val data	=[4]/[1]	industry avg EP relativity	assumption	assumption	=[1]*[6]*[7]*[8]	trend analysis	assumption	assumption	=[4]*[10]* [11]*[12]	=[13]/[9]	selected
2008 / 1	703	856	-	856	121.8%	1.1080	1.0000	1.0000	779	1.3383	1.0000	1.0000	1,146	147.1%	
2008 / 2	971	1,003		1,003	103.3%	1.1044	1.0000	1.0000	1,072	1.2836	1.0000	1.0000	1,287	120.1%	
2009 / 1	1,074	1,047	-	1,047	97.5%	1.0911	1.0000	1.0000	1,172	1.3313	1.0000	1.0000	1,394	118.9%	-
2009 / 2	1,185	1,170		1,170	98.7%	1.0669	1.0000	1.0000	1,264	1.2764	1.0000	1.0000	1,493	118.1%	
2010 / 1	1,379	805	-	805	58.3%	1.0404	1.0000	1.0000	1,435	1.3650	1.0000	1.0000	1,098	76.5%	-
2010 / 2	1,309	1,147	-	1,147	87.6%	1.0155	1.0000	1.0000	1,329	1.3078	1.0000	1.0000	1,500	112.9%	-
2011 / 1	1,213	925	-	925	76.3%	0.9914	1.0000	1.0000	1,203	1.3571	1.0000	1.0000	1,256	104.4%	-
2011/2	1,240	985		985	79.5%	0.9648	1.0000	1.0000	1,196	1.3010	1.0000	1.0000	1,282	107.2%	
2012 / 1	1,296	801	-	801	61.8%	0.9517	1.0000	1.0000	1,233	1.3508	1.0000	1.0000	1,082	87.8%	-
2012 / 2	1,499	979	-	979	65.3%	0.9505	1.0000	1.0000	1,425	1.2951	1.0000	1.0000	1,268	89.0%	-
2013 / 1	1,490	964	-	964	64.7%	0.9465	1.0000	1.0000	1,410	1.3443	1.0000	1.0000	1,296	91.9%	-
2013 / 2	1,415	925	0	925	65.3%	0.9585	1.0000	1.0000	1,356	1.2888	1.0000	1.0000	1,192	87.9%	-
2014 / 1	1,348	779	-	779	57.8%	0.9738	1.0000	1.0000	1,313	1.3371	1.0000	1.0000	1,042	79.4%	-
2014 / 2	1,391	700	-	700	50.3%	1.0043	1.0000	1.0000	1,397	1.2814	1.0000	1.0000	897	64.2%	-
2015 / 1	1,394	884	-	884	63.4%	1.0253	1.0000	1.0000	1,429	1.3085	1.0000	1.0000	1,156	80.9%	-
2015 / 2	1,423	809	0	810	56.9%	1.0552	1.0000	1.0000	1,502	1.2168	1.0000	1.0000	985	65.6%	-
2016 / 1	1,386	629	-	628	45.3%	1.0796	1.0000	1.0000	1,496	1.2239	1.0000	1.0000	769	51.4%	16.7%
2016 / 2	1,383	897	0	895	64.7%	1.0957	1.0000	1.0000	1,515	1.1373	1.0000	1.0000	1,018	67.2%	16.7%
2017 / 1	1,402	998	4	1,000	71.3%	1.0948	1.0000	1.0000	1,535	1.1440	1.0000	1.0000	1,143	74.5%	16.7%
2017 / 2	2,041	1,504	24	1,523	74.6%	1.0898	1.0000	1.0000	2,224	1.0632	1.0000	1.0000	1,619	72.8%	16.7%
2018 / 1	2,603	2,181	18	2,181	83.8%	1.0751	1.0000	1.0000	2,798	1.0702	1.0000	1.0000	2,334	83.4%	16.7%
2018 / 2	2,853	2,489	153	2,542	89.1%	1.0409	1.0000	1.0000	2,970	0.9941	1.0000	1.0000	2,527	85.1%	16.7%
Total	31,998	23,476	200	23,547	73.6%	1.0330	1.0000	1.0000	33,053	1.2224	1.0000	1.0000	28,784	87.1%	100.0%
			*indemnity & a	llowed claim:	s expense	2018-2 AIX				on industry 20	18-2 AIX data	١	weighted average:	72.4%	
			from FA Valua	tion Summary						derived from 2	019 / 1 on-leve	els	selected:	72.0%	70.0%
														current	prior

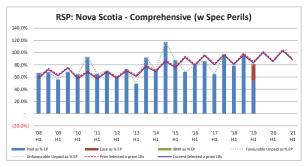
[6] Rate Change factors are current AHY on-level factors estimated using industry projected earned premium data, details are presented in the a priori LR model Rate Change Factors exhibit

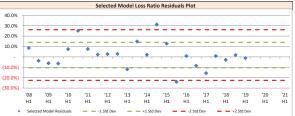
[7],[8] Additional premium adjustment factors not included in Rate Change factors [6], as necessary. If applicable, details are presented in the a priori LR model additional Premium Adjustment Factors exhibit
[10] Loss Cost Trend factors are current AHY on-level modeled loss cost adjustment factors selected as part of the associated FA industry trend analysis using industry indemnity only claims data. These loss cost adjustment factors are not confined to claims trend and include any applicable adjustments for product reform, details are presented in the a priori LR model Claims Trend and Index factors exhibit [11] Reform Adj factors are additional explicit product reform adjustment factors not included in Loss Cost Trend factors [10], as necessary. If applicable, details are presented in the a priori LR model additional Claims Adjustment

[12] Additional claims adjustment factors not included in Loss Cost Trend factors [10], as necessary. If applicable, details are presented in the a priori LR model additional Claims Adjustment Factors exhibit

Current AHY: 2019 / 1

Accident Period	Current Selected	Prior Selected	Change
2008 / 1	58.0%	60.0%	(2.0%)
2008 / 2	72.0%	74.0%	(2.0%)
2009 / 1	62.0%	64.0%	(2.0%)
2009 / 2	75.0%	76.0%	(1.0%)
2010 / 1	57.0%	59.0%	(2.0%)
2010 / 2	68.0%	70.0%	(2.0%)
2011/1	57.0%	59.0%	(2.0%)
2011/2	68.0%	70.0%	(2.0%)
2012 / 1	58.0%	60.0%	(2.0%)
2012 / 2	70.0%	72.0%	(2.0%)
2013 / 1	61.0%	63.0%	(2.0%)
2013 / 2	77.0%	79.0%	(2.0%)
2014 / 1	69.0%	71.0%	(2.0%)
2014 / 2	86.0%	88.0%	(2.0%)
2015 / 1	75.0%	77.0%	(2.0%)
2015 / 2	92.0%	94.0%	(2.0%)
2016 / 1	79.0%	81.0%	(2.0%)
2016 / 2	95.0%	97.0%	(2.0%)
2017 / 1	80.0%	82.0%	(2.0%)
2017 / 2	96.0%	97.0%	(1.0%)
2018 / 1	81.0%	82.0%	(1.0%)
2018 / 2	96.0%	99.0%	(3.0%)
2019 / 1	83.0%	85.0%	(2.0%)
2019 / 2	100.0%	102.0%	(2.0%)
2020 / 1	85.0%	87.0%	(2.0%)
2020 / 2	103.0%	105.0%	(2.0%)
2021 / 1	88.0%	90.0%	(2.0%)





		Mar 31,	2019 valuatio	n result			Adjust EP to 20	19 / 1 rate leve	el .	Adjust Ultin	nate Claims Am	ount to 2019 /	1 clms level		
Accident Period	Actual Earned Premium	Paid Claims Amount	Case Reserves	Selected Ultimate Claims Amount*	Selected Ultimate Loss Ratio	Rate Change	Drift (RG, class, etc.)	Other	EP @ 2019 / 1 rate level	Loss Cost Trend Factor	Reform Adj Factor	Other Factor	Ult. Clms Amt @ 2019 / 1 clms level	On-Level to 2019 / 1 Loss Ratios	Weights
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]
	val data	val data	val data	val data	=[4]/[1]	industry avg EP relativity	assumption	assumption	=[1]*[6]*[7]*[8]	trend analysis	assumption	assumption	=[4]*[10]* [11]*[12]	=[13]/[9]	selected
2008 / 1	350	233	-	233	66.6%	1.2045	1.0000	1.0000	422	1.7166	1.0000	1.0000	400	94.8%	-
2008 / 2	475	324	-	324	68.2%	1.2168	1.0000	1.0000	578	1.4091	1.0000	1.0000	457	79.1%	-
2009 / 1	521	291	-	291	55.9%	1.2180	1.0000	1.0000	635	1.6287	1.0000	1.0000	474	74.6%	-
2009 / 2	567	389	-	389	68.6%	1.2008	1.0000	1.0000	681	1.3375	1.0000	1.0000	520	76.4%	-
2010 / 1	419	270	-	270	64.5%	1.1781	1.0000	1.0000	494	1.7031	1.0000	1.0000	460	93.1%	-
2010 / 2	429	399	-	399	93.1%	1.1423	1.0000	1.0000	490	1.3932	1.0000	1.0000	556	113.5%	-
2011 / 1	416	269	-	269	64.6%	1.1075	1.0000	1.0000	461	1.6050	1.0000	1.0000	432	93.7%	-
2011/2	435	306	-	306	70.2%	1.0702	1.0000	1.0000	466	1.3130	1.0000	1.0000	401	86.1%	-
2012 / 1	448	272	-	272	60.7%	1.0528	1.0000	1.0000	472	1.5119	1.0000	1.0000	411	87.1%	-
2012 / 2	501	365	-	365	72.9%	1.0480	1.0000	1.0000	525	1.2370	1.0000	1.0000	452	86.1%	-
2013 / 1	493	242	-	242	49.1%	1.0554	1.0000	1.0000	520	1.4253	1.0000	1.0000	345	66.3%	-
2013 / 2	469	431	-	431	91.9%	1.0887	1.0000	1.0000	511	1.1665	1.0000	1.0000	503	98.4%	-
2014 / 1	446	317	-	317	71.1%	1.1140	1.0000	1.0000	497	1.3439	1.0000	1.0000	426	85.7%	10.0%
2014 / 2	473	554	0	554	117.2%	1.1355	1.0000	1.0000	537	1.0995	1.0000	1.0000	610	113.6%	10.0%
2015 / 1	480	421	-	421	87.7%	1.1450	1.0000	1.0000	550	1.2662	1.0000	1.0000	533	96.9%	10.0%
2015 / 2	507	345	-	345	68.1%	1.1439	1.0000	1.0000	580	1.0360	1.0000	1.0000	358	61.7%	10.0%
2016 / 1	513	410	-	410	79.9%	1.1395	1.0000	1.0000	585	1.1938	1.0000	1.0000	489	83.6%	10.0%
2016 / 2	533	461	-	461	86.4%	1.1147	1.0000	1.0000	594	0.9765	1.0000	1.0000	450	75.8%	10.0%
2017 / 1	532	342	1	342	64.3%	1.0893	1.0000	1.0000	580	1.1255	1.0000	1.0000	385	66.4%	10.0%
2017 / 2	643	618	8	623	96.8%	1.0597	1.0000	1.0000	681	0.9203	1.0000	1.0000	573	84.1%	10.0%
2018 / 1	732	572	4	572	78.2%	1.0299	1.0000	1.0000	754	1.0608	1.0000	1.0000	607	80.5%	10.0%
2018 / 2	789	754	18	772	97.8%	1.0089	1.0000	1.0000	796	0.8680	1.0000	1.0000	670	84.2%	10.0%
Total	11,171	8,586	31	8,608	77.1%	1.1105	1.0000	1.0000	12,409	1.2211	1.0000	1.0000	10,512	84.7%	100.0%
			*indemnity & a from FA Valuat		expense	2018-2 AIX				on industry 20 derived from 2			veighted average: selected:	83.3% 83.0% current	85.0% prior

[6] Rate Change factors are current AHY on-level factors estimated using industry projected earned premium data, details are presented in the a priori LR model Rate Change Factors exhibit

[7],[8] Additional premium adjustment factors not included in Rate Change factors [6], as necessary. If applicable, details are presented in the a priori LR model additional Premium Adjustment Factors exhibit
[10] Loss Cost Trend factors are current AHY on-level modeled loss cost adjustment factors selected as part of the associated FA industry trend analysis using industry indemnity only claims data. These loss cost adjustment factors are not confined to claims trend and include any applicable adjustments for product reform, details are presented in the a priori LR model Claims Trend and Index factors exhibit [11] Reform Adj factors are additional explicit product reform adjustment factors not included in Loss Cost Trend factors [10], as necessary. If applicable, details are presented in the a priori LR model additional Claims Adjustment

[12] Additional claims adjustment factors not included in Loss Cost Trend factors [10], as necessary. If applicable, details are presented in the a priori LR model additional Claims Adjustment Factors exhibit

Estimated and Selected Ultimate Losses by Method

as at June 30, 2019
Coverage: Other Coverages
RSP: Nova Scotia
Amounts in: \$1,000s

		Actual Ex			1								LULA	mate Loss E	atimatas									
		ACLUAI EX	perience										UILI	mate Loss E	stimates									
Accident Year	Earned Premium	Paid Claims to Date	Case Reserves	Reported to Date	ELR Method*	Link Ratio Method	Implied BF ELR Method weight*	Implied BF Link Ratio Method weight*	BF Method*	ELR Method weight	Link Ratio Method weight	ELR & LR Wtd Method	Incurred (Zero IBNR)	User Defined	d User Defined 2	ELR Method Ult LR*	Link Ratio Method Ult LR	BF Method Ult LR*	ELR & LR Wtd Method Ult LR	Incurred (Zero IBNR) Ult LR	Ult LR	User Defined 2 Ult LR	Selected Ultimate Claims Amount	Selected Ultimate Loss Ratio
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
L																=([5]/[1])	=([6]/[1])	=([9]/[1])	=([12]/[1])	=([13]/[1])	=([14]/[1])	=([15]/[1])		=([23]/[1])
2007	506	469	-	469		469						469	469				92.7%		92.7%	92.7%			469	92.7%
2008	2,679	2,416	-	2,416		2,416						2,416	2,416				90.2%		90.2%	90.2%			2,416	90.2%
2009	3,581	2,897	-	2,897		2,897						2,897	2,897				80.9%		80.9%	80.9%			2,897	80.9%
2010	3,768	2,621	-	2,621	2,068	2,621	-	100.0%	2,621			2,621	2,621			54.9%	69.6%	69.6%	69.6%	69.6%			2,621	69.6%
2011	3,505	2,489	-	2,489	1,873	2,489	-	100.0%	2,489			2,489	2,489			53.4%	71.0%	71.0%	71.0%	71.0%			2,489	71.0%
2012	3,963	2,421	-	2,421	2,110	2,421	-	100.0%	2,421			2,421	2,421			53.2%	61.1%	61.1%	61.1%	61.1%			2,421	61.1%
2013	4,101	2,576	-	2,576	2,232	2,576	-	100.0%	2,576			2,576	2,576			54.4%	62.8%	62.8%	62.8%	62.8%			2,576	62.8%
2014	3,886	2,351	0	2,351	2,240	2,351	(0.8%)	100.8%	2,352			2,351	2,351			57.6%	60.5%	60.5%	60.5%	60.5%			2,351	60.5%
2015	4,047	2,459	0	2,459	2,538	2,459	2.5%	97.5%	2,461			2,487	2,459			62.7%	60.8%	60.8%	61.4%	60.8%			2,461	60.8%
2016	4,062	2,396	0	2,396	2,802	2,395	0.9%	99.1%	2,399			2,513	2,396			69.0%	59.0%	59.1%	61.9%	59.0%			2,406	59.2%
2017	4,869	3,472	20	3,491	3,562	3,484	18.9%	81.1%	3,498			3,523	3,491			73.2%	71.5%	71.9%	72.4%	71.7%			3,513	72.2%
2018	7,259	6,018	83	6,101	5,393	6,032	(5.7%)	105.7%	6,069			5,504	6,101			74.3%	83.1%	83.6%	75.8%	84.1%			6,083	83.8%
2019	3,926	2,724	644	3,367	2,828	3,311	5.3%	94.7%	3,286			-	3,367			72.0%	84.3%	83.7%		85.8%			3,269	83.3%
Total	50,150	35,309	747	36,055	27,647	35,921			30,172			32,266	36,055										35,973	

^{*}Earned Premium prior to data modernization (2009 / 2) was not allocated on a coverage level

^{**}For 'off-half' valuation quarters (Mar and Sep), the current accident year (CAY) by method Ultimate Loss estimates ([5] to [22]) are aggregated from a coverage level

Comparison of Estimated Ultimate Losses by Method as at June 30, 2019

Coverage: Other Coverages RSP: Nova Scotia Amounts in: \$1,000s

					Curren	t Valuation	Results (as at	Jun 2019)							Prior \	Valuation Results (as at Mar 2	2019)			Cha	ange from Pri	or Valuation	1
Accident Year	ELR Method*	Link Ratio Method	BF Method*	ELR & LR Wtd Method	Incurred (Zero IBNR)	User Define	d User Defined 2	Selected	IBNR Method**	Selected IBNR	Selected Ultimate	Selected Ultimate LR	ELR Method*	LR Ratio Method	BF Method*	Selected IBNR Method**	Selected IBNR	Selected Ultimate	Selected Ultimate LR	Incurred to Date	Selected IBNR	Selected Ultimate	Selected Ultimate LR
	[1]	[2]	[3]	[4]	[5]	[6]	[7]		[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
																					=([9]-[16])	=([10]-[17])	=([11]-[18])
2007		469		469	469			N/A		-	469	92.7%		469		N/A	-	469	92.7%	-	-	-	-
2008		2,416		2,416	2,416			N/A		-	2,416	90.2%		2,416		N/A	-	2,416	90.2%	-	-	-	-
2009		2,897		2,897	2,897			N/A		-	2,897	80.9%		2,897		N/A	-	2,897	80.9%	-	-	-	-
2010	2,068	2,621	2,621	2,621	2,621			N/A		-	2,621	69.6%	2,059	2,621	2,621	N/A	-	2,621	69.6%	-	-	-	-
2011	1,873	2,489	2,489	2,489	2,489			N/A		-	2,489	71.0%	1,866	2,489	2,489	N/A	-	2,489	71.0%	-	-	-	-
2012	2,110	2,421	2,421	2,421	2,421			N/A		-	2,421	61.1%	2,101	2,421	2,421	N/A	-	2,421	61.1%	-	-	-	-
2013	2,232	2,576	2,576	2,576	2,576			N/A		-	2,576	62.8%	2,193	2,576	2,576	N/A	-	2,576	62.8%	-	-	-	-
2014	2,240	2,351	2,352	2,351	2,351			N/A		-	2,351	60.5%	2,231	2,351	2,353	N/A	1	2,352	60.5%	-	(1)	(1)	-
2015	2,538	2,459	2,461	2,487	2,459			N/A		2	2,461	60.8%	2,515	2,459	2,464	N/A	5	2,464	60.9%	-	(3)	(3)	(0.1%)
2016	2,802	2,395	2,399	2,513	2,396			N/A		10	2,406	59.2%	2,754	2,393	2,401	N/A	19	2,415	59.4%	-	(9)	(9)	(0.2%)
2017	3,562	3,484	3,498	3,523	3,491			N/A		22	3,513	72.2%	3,468	3,488	3,507	N/A	25	3,525	72.2%	(8)	(3)	(11)	
2018	5,393	6,032	6,069	5,504	6,101			N/A		(18)	6,083	83.8%	5,272	6,072	6,121	N/A	(71)	6,133	83.9%	(103)	53	(50)	(0.1%)
2019	2,828	3,311	3,286		3,367			N/A		(98)	3,269	83.3%	2,869	3,652	3,278	N/A	(345)	1,598	81.9%	1,424	247	1,671	1.4%
Total	27,647	35,921	30,172	32,266	36,055					(82)	35,973		27,328	36,305	30,231		(366)	34,375		1,313	284	1,597	
																•				•			
2018 & Prior	24.819	32.610	26,886	32,266	32,688					16	32,704		24,459	32,652	26,953		(21)	32,777		(111)	37	(74)	

^{2018 &}amp; Prior 2 24,819 32,610 26,886 32,266 32,688
**Barned Premium prior to data modernization (2009 / 2) was not allocated on a coverage level
**IBNR selected on a coverage level and aggregated to a Government Line (or Total) level

Amounts in: \$1,000s

Estimated and Selected Ultimate Losses by Method

as at June 30, 2019

Coverage: Underinsured Motorist
RSP: Nova Scotia

		Actual Ex			1								I IIIa:	mate Loss E	'atimatas									
Accident Year	Earned Premium	Paid Claims to Date	Case Reserves	Reported to Date	ELR Method*	Method	Implied BF ELR Method weight*	Implied BF Link Ratio Method weight*	BF Method*	ELR Method weight	weight	ELR & LR Wtd Method			d User Defined 2	ELR Method Ult LR*	Link Ratio Method Ult LR*	BF Method Ult LR*	ELR & LR Wtd Method Ult LR*	Incurred (Zero IBNR) Ult LR*	change) Ult LR*	User Defined 2 Ult LR*	Selected Ultimate Claims Amount	Selected Ultimate Loss Ratio*
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
																=([5]/[1])	=([6]/[1])	=([9]/[1])	=([12]/[1])	=([13]/[1])	=([14]/[1])	=([15]/[1])		=([23]/[1])
2007 / 1	-			-						-	100.0%	-											٠	
2007 / 2	(0)			35		35				-	100.0%	35	35										35	
2008 / 1	(1)									-	100.0% 100.0%	-												
2008 / 2 2009 / 1	(1)	-		-							100.0%													
2009 / 1	102				20			100.0%		-	100.0%					20.0%								
2010 / 1	118			-	24			100.0%			100.0%					20.0%								
2010 / 2	114				23			100.0%			100.0%					20.0%								
2010 / 2	103	4		4		4		100.0%	4		100.0%	4	4			20.0%	3.9%	3.9%	3.9%	3.9%			4	3.9%
2011 / 2	97	- 1		_ '	19			100.0%			100.0%					20.0%	3.370	3.370	3.570	3.370				
2012 / 1	98	0		0		0		100.0%	0		100.0%	0	0			20.0%	0.3%	0.3%	0.3%	0.3%			0	0.3%
2012 / 2	121	4		4	24	4		100.0%	4	-	100.0%	4	4			20.0%	3.3%	3.3%	3.3%	3.3%			4	3.3%
2013 / 1	120	14		14	24	14		100.0%	14	-	100.0%	14	14			20.0%	12.0%	12.0%	12.0%	12.0%			14	12.0%
2013 / 2	114	-		-	23		-	100.0%		-	100.0%					20.0%								-
2014 / 1	110	-		-	22	-		100.0%	-	-	100.0%	-	-			20.0%							-	-
2014 / 2	118	-	-	-	24	-	3.7%	96.3%	1	-	100.0%	-	-			20.0%		0.7%					-	-
2015 / 1	119	-		-	24		2.5%	97.5%	1	-	100.0%		-			20.0%		0.5%					1	0.8%
2015 / 2	124	-		-	25		5.7%	94.3%	1	12.5%	87.5%	3	-			20.0%		1.1%	2.5%				1	0.8%
2016 / 1	122	-		-	24	-	6.3%	93.7%	2	25.0%	75.0%	6	-			20.0%		1.3%	5.0%				2	1.6%
2016 / 2	125	-	-	-	25	-	9.5%	90.5%	2	37.5%	62.5%	9	-			20.0%		1.9%	7.5%				9	7.2%
2017 / 1	121	-	-	-	24	-	22.2%	77.8%	5	50.0%	50.0%	12	-			20.0%		4.4%	10.0%				12	9.9%
2017 / 2	145	-	-	-	29		32.5%	67.5%	9	62.5%	37.5%	18	-			20.0%		6.5%	12.5%				18	12.4%
2018 / 1	161	5	-	5		10	45.8%	54.2%	20	75.0%	25.0%	27	5			20.0%	5.9%	12.3%	16.5%	3.2%			26	16.2%
2018 / 2	169	3	-	3		6	58.3%	41.7%	22	87.5%	12.5%	30	3			20.0%	3.8%	13.2%	18.0%	1.6%			31	18.2%
2019 / 1	167	11	13			101	76.3%	23.7%	49	100.0%	-		24			20.0%	60.6%	29.6%					33	19.8%
Total	2,495	77	13	90	494	175	1		136	1		164	90			I							191	

Total
 2,495
 77
 13
 90
 494
 175

 *Earned Premium prior to data modernization (2009 / 2) was not allocated on a coverage level

^{**}For 'off-half' valuation quarters (Mar and Sep), the current accident half-year (CAHY) by method Ultimate Loss estimates ([5] to [22]) are based on projected full AHY Earned Premium estimates

Comparison of Estimated IBNR by Method

as at June 30, 2019

Coverage: Underinsured Motorist RSP: Nova Scotia

Amounts in: \$1,000s

					Currer	nt Valuation	Results (as at	Jun 2019)						Prior	Valuation Results (as at Ma	r 2019)			Ch	ange from Pr	rior Valuatio	n
Accident Year	ELR Method IBNR*	Link Ratio Method IBNR	BF Method IBNR*	ELR & LR Wtd Method IBNR	Incurred (Zero IBNR) IBNR	User Define 1 IBNR	d User Defined 2 IBNR	Selected IBNR Method	Selected IBNR	Selected Ultimate	Selected Ultimate LR*	ELR Method IBNR*	Link Ratio Method IBNR	BF Method IBNR*	Selected IBNR Method	Selected IBNR	Selected Ultimate	Selected Ultimate LR*	Incurred to Date	Selected IBNR	Selected Ultimate	Selected Ultimate LR*
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
/-								Link Ratio Method							Link Ratio Method					=([9]-[16])	=([10]-[17])	=([11]-[18])
2007 / 1				-	-			Link Ratio Method	-	35					Link Ratio Method	-	35		-	-	-	l l
2007 / 2				-	-			Link Ratio Method	-	35						-	35		-	-	-	l l
2008 / 1				-	-			Link Ratio Method	-	-					Link Ratio Method	-	-		-	-	-	l l
2008 / 2				-	-			Link Ratio Method	-	-					Link Ratio Method Link Ratio Method	-	-		-	-	-	l l
2009 / 1 2009 / 2	20			-	-			Link Ratio Method	-	-		20			Link Ratio Method	-	-		-	-	-	
2009 / 2	20		-	-	-			Link Ratio Method	-	-	-	20	-	-	Link Ratio Method	-	-	-	-	-	-	- 1
2010 / 1	24		-	-	-			Link Ratio Method	-	-	-	24	-	-	Link Ratio Method	-	-	-	-	-	-	- 1
2010 / 2	17		-	-	-			Link Ratio Method	-		3.9%	17		-	Link Ratio Method	-		3.9%	-			
2011/1	19			-	-			Link Ratio Method	-	4	3.976	19		-	Link Ratio Method		4	3.970	-	-		
2011/2	19	-		-	-			Link Ratio Method	-	- 0	0.3%	19		-	Link Ratio Method		- 0	0.3%	-	-		- 1
2012 / 1	20	-		-	-			Link Ratio Method	-	0	3.3%	20		-	Link Ratio Method		0	3.3%	-	-		- 1
2012 / 2	10			-	-			Link Ratio Method	-	14	12.0%	10		-	Link Ratio Method		14	12.0%	-	-		- 1
2013 / 1	23			-	-			Link Ratio Method	-	14	12.0%	23		-	Link Ratio Method		14	12.0%	-	-		- 1
2013 / 2	23			-	-			Link Ratio Method	-	-		22			Link Ratio Method				-	-		-
2014/1	24							Link Ratio Method				24			BF Method	1	- 1	0.8%		(1)	(1)	
2014/2	24							BF Method	1	- 1	0.8%	24		2	BF Method	2	2	1.7%		(1)		
2015 / 2	25							BF Method	1	1	0.8%	25		2	BF Method	2	2	2.4%		(2)		
2015/2	24							BF Method	2	2	1.6%	24			ELR & LR Wtd Method	9	9	7.4%		(7)		
2016 / 2	25			9				ELR & LR Wtd Method	9	9	7.2%	25			ELR & LR Wtd Method	13	13	10.4%		(4)		
2017/1	24			12				ELR & LR Wtd Method	12	12	9.9%	24			ELR & LR Wtd Method	15				(3)		
2017 / 2	29		-	18				ELR & LR Wtd Method	18	18	12.4%	29			ELR & LR Wtd Method	22		15.1%		(4)		
2018/1	27		15	5 21				ELR & LR Wtd Method	21	26	16.2%	21			ELR & LR Wtd Method	20		19.5%	(6)	1	(5)	
2018 / 2	31		20					ELR & LR Wtd Method	28	31	18.2%	31		23		31		19.8%	- (0)	(3)		
2019 / 1	-		-	-				ELIT OF ENT WILL MICHIOG		33	19.8%	35		-	-				24	(8)		
Total	430	8	56	98	-				101	191		459		74		133			18	(32)		,
								•				•			•							
2018 / 2 & Prior	430	8	56	98	-				92	158		424	18	74		116	188		(6)	(24)	(30)	į

^{**}Current accident half-year IBNR and Ultimate Loss estimates derived from the CAHY Selections exhibit

Estimated and Selected Ultimate Losses by Method

as at June 30, 2019
Coverage: Collision (w All Perils)
RSP: Nova Scotia
Amounts in: \$1,000s

		Actual Ex	perience										Ulti	mate Loss Est	timates									$\overline{}$
Accident Year	Earned Premium	Paid Claims to Date	Case Reserves	Reported to Date	ELR Method*	Link Ratio Method	Implied BF ELR Method weight*	Implied BF Link Ratio Method weight*	BF Method*	ELR Method weight	Link Ratio Method weight	ELR & LR Wtd Method	Incurred (Zero IBNR)	User Defined	Data Correction	ELR Method Ult LR*	Link Ratio Method Ult LR	BF Method Ult LR*	ELR & LR Wtd Method Ult LR*	Incurred (Zero IBNR) Ult LR	User Defined 1 Ult LR	Data Correction Ult LR	Selected Ultimate Claims Amount	Selected Ultimate Loss Ratio*
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
/ .																=([5]/[1])	=([6]/[1])	=([9]/[1])	=([12]/[1])	=([13]/[1])	=([14]/[1])	=([15]/[1])		=([23]/[1])
2007 / 1	22	8	-	8		8				-	100.0%	8	8										8	
2007 / 2	485	338	-	338		338				-	100.0%	338	338										338	
2008 / 1	1,134	856		856		856				-	100.0%	856	856										856	
2008 / 2	1,554	1,003		1,003		1,003				-	100.0%	1,003	1,003										1,003	
2009 / 1	1,569	1,047		1,047		1,047				-	100.0%	1,047	1,047										1,047	
2009 / 2	1,425	1,170		1,170	855	1,170	-	100.0%	1,170	-	100.0%	1,170	1,170			60.0%	82.1%	82.1%	82.1%	82.1%			1,170	
2010 / 1	1,379	805		805	758	805	-	100.0%	805	-	100.0%	805	805			55.0%	58.3%	58.3%	58.3%	58.3%			805	
2010 / 2	1,309	1,147	-	1,147	733	1,147	-	100.0%	1,147	-	100.0%	1,147	1,147			56.0%	87.6%	87.6%	87.6%	87.6%			1,147	
2011 / 1	1,213	925	-	925	643	925	-	100.0%	925	-	100.0%	925	925			53.0%	76.3%	76.3%	76.3%	76.3%			925	
2011 / 2	1,240	985	-	985	657	985	-	100.0%	985	-	100.0%	985	985			53.0%	79.5%	79.5%	79.5%	79.5%			985	
2012 / 1	1,296	801		801	661	801	-	100.0%	801	-	100.0%	801	801			51.0%	61.8%	61.8%	61.8%	61.8%			801	61.8%
2012 / 2	1,499	979		979	795	979	-	100.0%	979	-	100.0%	979	979			53.0%	65.3%	65.3%	65.3%	65.3%			979	
2013 / 1	1,490	964	-	964	760	964	-	100.0%	964	-	100.0%	964	964			51.0%	64.7%	64.7%	64.7%	64.7%			964	
2013 / 2	1,415	925	-	925	764	925	-	100.0%	925	-	100.0%	925	925			54.0%	65.3%	65.3%	65.3%	65.3%			925	
2014 / 1	1,348	779	-	779	701	779	-	100.0%	779	-	100.0%	779	779			52.0%	57.8%	57.8%	57.8%	57.8%			779	57.8%
2014 / 2	1,391	700	-	700	779	700	-	100.0%	700	-	100.0%	700	700			56.0%	50.3%	50.3%	50.3%	50.3%			700	50.3%
2015 / 1	1,394	884		884	780	884	-	100.0%	884	-	100.0%	884	884			56.0%	63.4%	63.4%	63.4%	63.4%			884	63.4%
2015 / 2	1,423	809	0	810	882	810	-	100.0%	810	12.5%	87.5%	819	810			62.0%	56.9%	56.9%	57.5%	56.9%			810	56.9%
2016 / 1	1,386	629	-	629	887	629	-	100.0%	629	25.0%	75.0%	694	629			64.0%	45.4%	45.4%	50.0%	45.4%			629	45.4%
2016 / 2	1,383	897	0	897	954	896	(0.1%)	100.1%	896	37.5%	62.5%	918	897			69.0%	64.8%	64.8%	66.4%	64.8%			896	64.8%
2017 / 1	1,401	996	-	996	966	994	(0.2%)	100.2%	994	50.0%	50.0%	980	996			69.0%	70.9%	71.0%	70.0%	71.1%			994	70.9%
2017 / 2	2,030	1,509	19	1,528	1,502	1,524	(0.3%)	100.3%	1,524	62.5%	37.5%	1,510	1,528			74.0%	75.1%	75.1%	74.4%	75.3%			1,524	75.1%
2018 / 1	2,586	2,153	17	2,171	1,862	2,155	(0.7%)	100.7%	2,157	75.0%	25.0%	1,935	2,171			72.0%	83.3%	83.4%	74.8%	83.9%			2,157	83.4%
2018 / 2	2,832	2,497	51	2,548	2,124	2,497	(2.0%)	102.0%	2,505	87.5%	12.5%	2,170	2,548			75.0%	88.2%	88.5%	76.6%	90.0%			2,505	88.5%
2019 / 1	2,960	2,201	513	2,714	2,131	2,560	(6.0%)	106.0%	2,586	100.0%			2,714			72.0%	86.5%	87.4%					2,586	87.4%
Total	37,163	26,006	600	26,606	20,195	26,379			23,162			23,340	26,606										26,414	

^{*}Earned Premium prior to data modernization (2009 / 2) was not allocated on a coverage level

^{**}For 'off-half' valuation quarters (Mar and Sep), the current accident half-year (CAHY) by method Ultimate Loss estimates ([5] to [22]) are based on projected full AHY Earned Premium estimates

Comparison of Estimated IBNR by Method as at June 30, 2019

Coverage: Collision (w All Perils)
RSP: Nova Scotia

Amounts in: \$1,000s

	Current Valuation Results (as at Jun 2019)											Prior Valuation Results (as at Mar 2019)							Change from Prior Valuation			
Accident Year	ELR Method IBNR*	Link Ratio Method IBNR	BF Method IBNR*	ELR & LR Wtd Method IBNR	Incurred (Zero IBNR) IBNR	User Define 1 IBNR	d User Defined 2 IBNR	Selected IBNR Method	Selected IBNR	Selected Ultimate	Selected Ultimate LR*	ELR Method IBNR*	Link Ratio Method IBNR	BF Method IBNR*	Selected IBNR Method	Selected IBNR	Selected Ultimate	Selected Ultimate LR*	Incurred to Date	Selected IBNR	Selected Ultimate	Selected Ultimate LR*
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
2007 / 1								Link Ratio Method		8					Link Ratio Method		8			=([9]-[16])	=([10]-[17])	=([11]-[18])
2007 / 1		-						Link Ratio Method	-	338					Link Ratio Method	-	338		-	-	-	
2007 / 2		-						Link Ratio Method	-	338 856					Link Ratio Method	-	338 856		-	-	-	
2008 / 2					-			Link Ratio Method		1,003					Link Ratio Method		1,003		_		-	
2008 / 2					-			Link Ratio Method		1,003					Link Ratio Method		1,003		_		-	
2009 / 1	(315)				-			Link Ratio Method	-	1,170	82.1%	(343)			Link Ratio Method		1,170	82.1%	-		-	
2009 / 2	(46)			-				Link Ratio Method		805	58.3%	(60)		-	Link Ratio Method		805	58.3%		-		
2010 / 1	(414)			-				Link Ratio Method		1,147	87.6%	(427)		-	Link Ratio Method		1,147	87.6%		-		
2010 / 2	(282)			_				Link Ratio Method		925	76.3%	(295)			Link Ratio Method		925	76.3%				
2011/1	(328)			_				Link Ratio Method		985	79.5%	(341)			Link Ratio Method		985	79.5%				
2011/2	(140)			_				Link Ratio Method		801	61.8%	(153)			Link Ratio Method		801	61.8%				
2012 / 2	(184)			_				Link Ratio Method		979	65.3%	(199)			Link Ratio Method		979	65.3%				
2012 / 2	(204)							Link Ratio Method		964	64.7%	(234)			Link Ratio Method		964	64.7%				
2013 / 2	(160)							Link Ratio Method		925	65.3%	(189)			Link Ratio Method		925	65.3%				
2014 / 1	(78)							Link Ratio Method	_	779	57.8%	(92)			Link Ratio Method	_	779	57.8%				
2014 / 2	79			_				Link Ratio Method	_	700	50.3%	65	_	_	Link Ratio Method	_	700	50.3%	_	_	_	
2015 / 1	(103)			_	_			Link Ratio Method	_	884	63.4%	(117)	-		Link Ratio Method		884	63.4%	_	_	_	
2015 / 2	73			9	_			Link Ratio Method	_	810	56.9%	44	_		Link Ratio Method		810	56.9%	_	_	_	
2016 / 1	258	-		64				Link Ratio Method	-	629	45.4%	216	(1)	(1)	Link Ratio Method	(1)	628	45.3%	_	1	1	0.1%
2016 / 2	58	(1)	(1	1) 21	-			Link Ratio Method	(1)	896	64.8%	30	(2)		Link Ratio Method	(2)	895	64.7%	_	1	1	0.1%
2017 / 1	(29)		(2		-			Link Ratio Method	(2)	994	70.9%	(77)			Link Ratio Method	(3)	1,000	71.3%	(7)	1	(6)	
2017 / 2	(26)		(4					Link Ratio Method	(4)	1,524	75.1%	(99)			BF Method	(5)	1,523	74.6%	_ ` `	1	1	0.5%
2018 / 1	(309)		(14					BF Method	(14)	2,157	83.4%	(429)			BF Method	(18)	2,181	83.8%	(29)	4	(25)	(0.4%)
2018 / 2	(424)		(43					BF Method	(43)	2,505	88.5%	(588)		(100)	BF Method	(100)	2,542	89.1%	(94)	57	(37)	
2019/1	-	-	-	-					(128)	2,586	87.4%	511	1,380	980		(365)	1,254	85.4%	1,096	237	1,333	2.0%
Total	(2,576)	(74)	(64	1) (552)	-				(192)	26,414		(2,775)	1,224	851		(494)	25,147		966	302	1,268	
																					(1	
2018 / 2 & Prior	(2,576)	(74)	(64	1) (552)	-			1	(64)	23,828		(3,286)	(156)	(129)	1	(129)	23,893		(130)	65	(65)	

^{**}Current accident half-year IBNR and Ultimate Loss estimates derived from the CAHY Selections exhibit

Estimated and Selected Ultimate Losses by Method

as at June 30, 2019

Coverage: Comprehensive (w Spec Perils)

RSP: Nova Scotia Amounts in: \$1,000s

		Actual Ex	perience		Ultimate Loss Estimates																			
Accident Year	Earned Premium	Paid Claims to Date	Case Reserves	Reported to Date	ELR Method*	Link Ratio Method	Implied BF ELR Method weight*	Link Patio	BF Method*	ELR Method weight	Link Ratio Method weight	ELR & LR Wtd Method		User Defined	Data Correction	ELR Method Ult LR*	Link Ratio Method Ult LR	BF Method Ult LR*	ELR & LR Wtd Method Ult LR*	Incurred (Zero IBNR) Ult LR	User Defined 1 Ult LR	Data Correction Ult LR	Selected Ultimate Claims Amount	Selected Ultimate Loss Ratio*
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
/ .																=([5]/[1])	=([6]/[1])	=([9]/[1])	=([12]/[1])	=([13]/[1])	=([14]/[1])	=([15]/[1])		=([23]/[1])
2007 / 1	(4)	4	-	4		4				-	100.0%	4	4										4	
2007 / 2	(1)		-	84		84				-	100.0%	84	84										84	
2008 / 1	(4)			233 324		233 324				-	100.0%	233 324	233 324										233 324	
2008 / 2	109	291		291		291				-	100.0% 100.0%	291	291										291	
2009 / 1 2009 / 2	346	389		389	259	389		100.0%	389	-	100.0%	389	389			75.0%	112.6%	112.6%	112.6%	112.6%			389	112.6%
2010 / 1	419	270		270	239	270		100.0%	270	-	100.0%	270	270			57.0%	64.5%	64.5%	64.5%	64.5%			270	
2010 / 1	429	399		399	292	399		100.0%	399		100.0%	399	399			68.0%	93.1%	93.1%	93.1%	93.1%			399	93.1%
2010 / 2	416	269		269	237	269		100.0%	269		100.0%	269	269			57.0%	64.6%	64.6%	64.6%	64.6%			269	
2011 / 2	435	306		306	296	306		100.0%	306		100.0%	306	306			68.0%	70.2%	70.2%	70.2%	70.2%			306	70.2%
2012 / 1	448	272		272	260	272		100.0%	272		100.0%	272	272			58.0%	60.7%	60.7%	60.7%	60.7%			272	60.7%
2012 / 2	501	365		365	351	365	_	100.0%	365	-	100.0%	365	365			70.0%	72.9%	72.9%	72.9%	72.9%			365	72.9%
2013 / 1	493	242		242	300	242	-	100.0%	242	-	100.0%	242	242			61.0%	49.2%	49.2%	49.2%	49.2%			242	49.2%
2013 / 2	469	431		431	361	431	-	100.0%	431	-	100.0%	431	431			77.0%	91.9%	91.9%	91.9%	91.9%			431	91.9%
2014 / 1	446	317		317	308	317	-	100.0%	317	-	100.0%	317	317			69.0%	71.1%	71.1%	71.1%	71.1%			317	71.1%
2014 / 2	473	554	0	554	407	554	-	100.0%	554	-	100.0%	554	554			86.0%	117.3%	117.3%	117.3%	117.3%			554	117.3%
2015 / 1	480	421		421	360	421	-	100.0%	421	-	100.0%	421	421			75.0%	87.6%	87.6%	87.6%	87.6%			421	87.6%
2015 / 2	507	345		345	466	345	-	100.0%	345	12.5%	87.5%	360	345			92.0%	68.1%	68.1%	71.1%	68.1%			345	68.1%
2016 / 1	513	410	-	410	405	410	-	100.0%	410	25.0%	75.0%	409	410			79.0%	79.8%	79.8%	79.6%	79.8%			410	79.8%
2016 / 2	533	461	-	461	506	461	-	100.0%	461	37.5%	62.5%	478	461			95.0%	86.5%	86.5%	89.7%	86.5%			461	86.5%
2017 / 1	532	342	1	343	426	343	-	100.0%	343	50.0%	50.0%	384	343			80.0%	64.5%	64.5%	72.3%	64.5%			343	64.5%
2017 / 2	641	625	0	625	615	623	(0.3%)	100.3%	623	62.5%	37.5%	618	625			96.0%	97.2%	97.2%	96.4%	97.5%			623	97.2%
2018 / 1	729	572	1	572	590	568	(0.7%)	100.7%	568	75.0%	25.0%	585	572			81.0%	78.0%	77.9%	80.2%	78.5%			568	78.0%
2018 / 2	782	789	14	803	751	797	(0.8%)	100.8%	797	87.5%	12.5%	757	803			96.0%	101.8%	101.9%	96.7%	102.6%			797	101.8%
2019 / 1	799	511	117	629	663	650	3.2%	96.8%	650	100.0%			629			83.0%	81.4%	81.4%					650	81.4%
Total	10,492	9,226	133	9,359	8,093	9,368			8,432			8,762	9,359										9,368	

^{*}Earned Premium prior to data modernization (2009 / 2) was not allocated on a coverage level

^{**}For 'off-half' valuation quarters (Mar and Sep), the current accident half-year (CAHY) by method Ultimate Loss estimates ([5] to [22]) are based on projected full AHY Earned Premium estimates

Comparison of Estimated IBNR by Method

as at June 30, 2019

Coverage: Comprehensive (w Spec Perils)
RSP: Nova Scotia

Amounts in: \$1,000s

					Currer	nt Valuation F	lesults (as at .	Jun 2019)						Prior '	Valuation Results (as at Mar	2019)			Change from Prior Valuation				
Accident Year	ELR Method IBNR*	Link Ratio Method IBNR		ELR & LR Wtd Method IBNR	Incurred (Zero IBNR) IBNR	User Defined 1 IBNR	User Defined 2 IBNR	Selected IBNR Method	Selected IBNR	Selected Ultimate	Selected Ultimate LR*	ELR Method IBNR*	Link Ratio Method IBNR	BF Method IBNR*	Selected IBNR Method	Selected IBNR	Selected Ultimate	Selected Ultimate LR*	Incurred to Date	Selected IBNR	Selected Ultimate	Selected Ultimate LR*	
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	
		_																		=([9]-[16])	=([10]-[17])	=([11]-[18])	
2007 / 1				-	-			Link Ratio Method	-	4			-		Link Ratio Method	-	4		-	-	-		
2007 / 2				-	-			Link Ratio Method	-	84			-		Link Ratio Method	-	84		-	-	-		
2008 / 1				-	-			Link Ratio Method	-	233			-		Link Ratio Method	-	233		-	-	-		
2008 / 2				-	-			Link Ratio Method	-	324			-		Link Ratio Method	-	324		-	-	-		
2009 / 1				-	-			Link Ratio Method	-	291			-		Link Ratio Method	-	291		-	-	-		
2009 / 2	(130)		-	-	-			Link Ratio Method	-	389	112.6%	(126)		-	Link Ratio Method	-	389	112.6%	-	-	-	-	
2010 / 1	(31)		-	-	-			Link Ratio Method	-	270	64.5%	(23)		-	Link Ratio Method	-	270	64.5%	-	-	-	-	
2010 / 2	(108)		-	-	-			Link Ratio Method	-	399	93.1%	(99)		-	Link Ratio Method	-	399	93.1%	-	-	-	-	
2011/1	(31)		-	-	-			Link Ratio Method	-	269	64.6%	(23)		-	Link Ratio Method	-	269	64.6%	-	-	-	-	
2011/2	(10)		-	-	-			Link Ratio Method	-	306	70.2%	(1)		-	Link Ratio Method	-	306	70.2%	-	-	-		
2012 / 1	(12)			-	-			Link Ratio Method	-	272	60.7%	(3)		-	Link Ratio Method	-	272	60.7%	-	-	-	-	
2012 / 2	(14)	-	-	-	-			Link Ratio Method	-	365	72.9%	(4)	-	-	Link Ratio Method	-	365	72.9%	-	-	-	-	
2013 / 1	58	-	-	-	-			Link Ratio Method	-	242	49.2%	68	-	-	Link Ratio Method	-	242	49.2%	-	-	-	-	
2013/2	(70)	-	-	-	-			Link Ratio Method	-	431	91.9%	(61)	-	-	Link Ratio Method	-	431	91.9%	-	-	-	-	
2014 / 1	(9)	-	-	-	-			Link Ratio Method	-	317	71.1%	(0)	-	-	Link Ratio Method	-	317	71.1%	-	-	-		
2014 / 2	(148)	-	-	-	-			Link Ratio Method	-	554	117.3%	(138)	-	-	Link Ratio Method	-	554	117.3%	-	-	-		
2015 / 1	(61)	-		-	-			Link Ratio Method	-	421	87.6%	(51)	-	-	Link Ratio Method	-	421	87.6%	-	-	-	-	
2015 / 2	121	-		15	-			Link Ratio Method	-	345	68.1%	131	-	-	Link Ratio Method	-	345	68.1%	-	-	-	-	
2016 / 1	(4)) -		(1)	-			Link Ratio Method	-	410	79.8%	6	-	-	Link Ratio Method	-	410	79.8%	-	-	-	-	
2016 / 2	45	-		17	-			Link Ratio Method	-	461	86.5%	56	-	-	Link Ratio Method	-	461	86.5%	-	-	-	-	
2017 / 1	82	-	-	41	-			Link Ratio Method		343	64.5%	93	(0)	(1)	BF Method	(1)	342	64.3%	-	1	1	0.2%	
2017 / 2	(10)) (2)	(2	2) (7)				BF Method	(2)	623	97.2%	(2)	(3)	(3)	BF Method	(3)	623	96.9%	(1)	1		0.3%	
2018 / 1	18	(4)	(4	4) 13				BF Method	(4)	568	78.0%	24	(4)	(4)	BF Method	(4)	572	78.2%	(4)	-	(4)) (0.2%)	
2018 / 2	(52)) (6)	(6	5) (46)	-			BF Method	(6)	797	101.8%	9	0	0	BF Method	-	772	97.9%	31	(6)	25	3.9%	
2019 / 1		-		-				-	21	650	81.4%	380	329	355		3	327	81.8%	305	18	323	(0.4%)	
Total	(364)	(12)	(12	2) 32	-				9	9,368		236	322	347		(5)	9,023		331	14	345		
/								T					-		1								
2018 / 2 & Prior	(364)) (12)	(12	2) 32	-				(12)	8,718		(145)	(8)	(8)		(8)	8,696		26	(4)	22		

^{*}Earned Premium prior to data modernization (2009 / 2) was not allocated on a coverage level
**Current accident half-year IBNR and Ultimate Loss estimates derived from the CAHY Selections exhibit



Nova Scotia RSP

Exhibit C

Interest Rate Sensitivity

Summary of Interest Rate Sensitivity

\$ Format: \$000s

	Ac	tuarial Present	Value of Provis	ions at Various	Discount Rates	- Dec. 31, 2019	projected Unpa	iid
AY	0.41%	0.91%	1.41%	1.91%	2.41%	2.91%	1.43%	2.28%
2007	_	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-	-
2009	66	65	65	64	64	63	65	64
2010	-	-	-	-	-	-	-	-
2011	153	151	149	147	145	143	149	146
2012	752	746	739	733	727	721	739	729
2013	1,855	1,841	1,827	1,814	1,801	1,788	1,827	1,804
2014	1,123	1,115	1,108	1,100	1,093	1,086	1,107	1,095
2015	3,314	3,287	3,261	3,236	3,211	3,187	3,260	3,217
2016	4,692	4,647	4,603	4,560	4,518	4,477	4,601	4,529
2017	8,587	8,487	8,390	8,296	8,202	8,113	8,387	8,226
2018	15,538	15,329	15,124	14,926	14,731	14,542	15,116	14,781
2019	21,115	20,784	20,463	20,150	19,844	19,548	20,449	19,923
Total	57,195	56,452	55,729	55,026	54,336	53,668	55,700	54,514
	curr - 100 bp	curr - 50 bp	curr val	curr + 50bp	curr + 100bp	curr + 150bp	prior val	prior fyr end
			assumption				assumption	assumption
	-							
				•	o Valuation Ass			
AY	0.41%	0.91%	1.41%	1.91%	2.41%	2.91%	1.43%	2.28%
Total	1,466	723	-	(703)	(1,393)	(2,061)	(29)	(1,215)
	curr - 100 bp	curr - 50 bp	curr val	curr + 50bp	curr + 100bp	curr + 150bp	prior val	prior fyr end
			assumption				assumption	assumption
		<u> </u>	Percentage	Impact Relativ	e to Valuation A	ssumption		
AY	0.41%	0.91%	1.41%	1.91%	2.41%	2.91%	1.43%	2.28%
2007	-	-	-	-	-	-	-	-
2008								
2009	1.5%	-	-	(1.5%)	(1.5%)	(3.1%)	-	(1.5%)
2010								
2011	2.7%	1.3%	-	(1.3%)	(2.7%)	(4.0%)	-	(2.0%)
2012	1.8%	0.9%		(0.8%)	(1.6%)	(2.4%)		(1.4%)
2013	1.5%	0.8%	-	(0.7%)	(1.4%)	(2.1%)	-	(1.3%)
2014	1.4%	0.6%		(0.7%)	(1.4%)	(2.0%)	(0.1%)	(1.2%)
2015	1.6%	0.8%	-	(0.8%)	(1.5%)	(2.3%)	(0.0%)	
2016	1.9%	1.0%		(0.9%)	(1.8%)	(2.7%)	(0.0%)	:
2017	2.3%	1.2%	-	(1.1%)	(2.2%)	(3.3%)	(0.0%)	(2.0%)
2018	2.7%	1.4%		(1.3%)	(2.6%)	(3.8%)	(0.1%)	
2019	3.2%	1.6%	-	(1.5%)	(3.0%)	(4.5%)	(0.1%)	(2.6%)
Total	2.6%	1.3%	-	(1.3%)	(2.5%)	(3.7%)	(0.1%)	(2.2%)
	curr - 100 bp	curr - 50 bp	curr val	curr + 50bp	curr + 100bp	curr + 150bp	prior val	prior fyr end
			assumption				assumption	assumption



Nova Scotia RSP

Exhibit D

Claims Development Margins

Margins Table (by coverage)

\$ Format: \$000s RSP Nova Scotia as at: 2019m06 Emerge: Paid to Ultimate

use margins as at 2019m12

Current Valuation as at Jun. 30, 2019 Selected Margins for Adverse Development

Accident Half Year	Bodily Injury	Property Damage (w DCPD)	Direct Comp Property Damage	Third Party Liability	AccBen (indivis)	Uninsured Automobile	Accident Benefits	Underinsured Motorist	Collision (w All Perils)	Comprehensive (w Spec Perils)	Other Coverages	Total
2007 / 1	10.0%	10.0%	-	10.0%	10.0%	10.0%	10.0%	10.0%	5.0%	5.0%	10.0%	10.0%
2007 / 2	10.0%	10.0%	-	10.0%	10.0%	10.0%	10.0%	10.0%	5.0%	5.0%	10.0%	10.0%
2008 / 1	10.0%	10.0%		10.0%	10.0%	10.0%	10.0%	10.0%	5.0%	5.0%	10.0%	10.0%
2008 / 2	10.0%	10.0%		10.0%	10.0%	10.0%	10.0%	10.0%	5.0%	5.0%	10.0%	10.0%
2009 / 1	10.0%	10.0%	-	10.0%	10.0%	10.0%	10.0%	10.0%	5.0%	5.0%	10.0%	10.0%
2009 / 2	10.0%	10.0%		10.0%	10.0%	10.0%	10.0%	10.0%	5.0%	5.0%	10.0%	10.0%
2010 / 1	10.0%	10.0%	-	10.0%	10.0%	10.0%	10.0%	10.0%	5.0%	5.0%	10.0%	10.0%
2010 / 2	10.0%	10.0%		10.0%	10.0%	10.0%	10.0%	10.0%	5.0%	5.0%	10.0%	10.0%
2011 / 1	10.0%	10.0%	-	10.0%	10.0%	10.0%	10.0%	10.0%	5.0%	5.0%	10.0%	10.0%
2011 / 2	10.0%	10.0%		10.0%	10.0%	10.0%	10.0%	10.0%	5.0%	5.0%	10.0%	10.0%
2012 / 1	10.0%	10.0%		10.0%	10.0%	10.0%	10.0%	10.0%	5.0%	5.0%	10.0%	10.0%
2012 / 2	10.0%	10.0%	-	10.0%	10.0%	10.0%	10.0%	10.0%	5.0%	5.0%	10.0%	10.0%
2013 / 1	10.0%	10.0%		10.0%	10.0%	10.0%	10.0%	10.0%	5.0%	5.0%	10.0%	10.0%
2013 / 2	10.0%	10.0%	-	10.0%	10.0%	10.0%	10.0%	10.0%	5.0%	5.0%	10.0%	10.0%
2014 / 1	10.0%	10.0%		10.0%	10.0%	10.0%	10.0%	10.0%	5.0%	5.0%	10.0%	10.0%
2014 / 2	10.0%	10.0%		10.0%	10.0%	10.0%	10.0%	10.0%	5.0%	5.0%	10.0%	10.0%
2015 / 1	10.0%	10.0%	-	10.0%	10.0%	10.0%	10.0%	10.0%	5.0%	5.0%	10.0%	10.0%
2015 / 2	10.0%	10.0%		10.0%	10.0%	10.0%	10.0%	10.0%	5.0%	5.0%	8.7%	10.0%
2016 / 1	12.5%	10.0%	-	12.5%	10.0%	10.0%	10.0%	12.5%	5.0%	5.0%	12.5%	12.4%
2016 / 2	12.5%	10.0%		12.5%	10.0%	10.0%	10.0%	12.5%	5.0%	5.0%	12.5%	12.5%
2017 / 1	12.5%	10.0%	-	12.5%	10.0%	10.0%	10.0%	12.5%	5.0%	5.0%	12.5%	12.3%
2017 / 2	12.5%	10.0%		12.5%	10.0%	10.0%	10.0%	12.5%	5.0%	5.0%	9.8%	12.1%
2018 / 1	12.5%	10.0%	-	12.5%	10.0%	10.0%	10.0%	12.5%	5.0%	5.0%	12.5%	12.3%
2018 / 2	12.5%	10.0%		12.5%	10.0%	10.0%	10.0%	12.5%	5.0%	5.0%	10.4%	12.3%
2019 / 1	12.5%	10.0%	-	12.5%	10.0%	10.0%	10.0%	12.5%	5.0%	5.0%	7.4%	12.2%
2019 / 2	12.5%	10.0%	-	12.4%	10.0%	10.0%	10.0%	12.5%	5.0%	5.0%	5.4%	11.8%
2020 / 1	12.5%	10.0%		12.0%	10.0%	10.0%	10.0%	12.5%	5.0%	5.0%	5.1%	10.3%
2020 / 2	12.5%	10.0%		12.0%	10.0%	10.0%	10.0%	12.5%	5.0%	5.0%	5.1%	10.3%
prem liab	12.5%	10.0%	-	12.0%	10.0%	10.0%	10.0%	12.5%	5.0%	5.0%	5.1%	10.3%

discount rate: 1.41% margin (basis points): 25

Printed: 2019-11-14, 11:12 AM