

DELAWARE COMPENSATION RATING BUREAU, INC.
F CLASS FILING

ANALYSIS OF EXPERIENCE

The following pages present an analysis of Delaware “F” class experience. The analysis is based on data reported to the DCRB under the Unit Statistical Plan.

Reported Premium and Losses - Pages 1 and 2 present reported standard earned premiums and incurred losses by policy year separately for indemnity (page 1) and medical (page 2). Losses are shown through 10th report which is the latest report currently available under the Unit Statistical Plan.

Indicated Loss Development Factors - Page 3 (indemnity) and page 4 (medical) show age-to-age development factors based on reported losses. A weighted average based on all available data points was calculated and formed the basis for the factors ultimately selected. The process for calculation of selected loss development factors and a tail factor are shown on pages 5 and 6. Factors to ultimate are calculated by compounding the age-to-age and 10th-to-ultimate factors.

Selected Loss Development Factors - Page 5 (indemnity) and page 6 (medical) show the derivation of selected age-to-age and 10th-to-ultimate development factors. The residuals of all years available average indicated age-to-age development factors from pages 3 and 4 were fitted to a curve of the form $y = a + b/x + c/x^2 + d/x^3$ for indemnity and $y = a + b/x^{1.5} + c * \ln(x)/x^2$ for medical.

Loss Ratios - Indemnity and medical ultimate loss ratios are calculated on page 7.

Graphs - Indemnity, medical and total ultimate loss ratio graphs for policy years 2008 through 2017 are shown on page 8.

Trend Summary - An analysis of loss ratio trend is summarized on page 9. Linear and exponential trend lines were used to project trended loss ratios for indemnity and medical using combinations of policy years ranging from three to ten points. However, the lack of data points left a number of the results meaningless. Ten-year weighted average loss ratios, and 0% annual trend, were selected for both indemnity and medical losses. The resulting trended loss ratios are 38.28% for indemnity and 18.14% for medical.

DELAWARE COMPENSATION RATING BUREAU

"F" CLASS UNIT STATISTICAL PLAN EXPERIENCE

REPORTED STANDARD EARNED PREMIUM AND INDEMNITY INCURRED LOSSES

Policy Year	Standard Earned Premium	Reported Indemnity Incurred Losses Report Level									
		1	2	3	4	5	6	7	8	9	10
02	350,922	131,206	459,669	275,146	505,102	505,103	505,103	505,103	505,103	505,103	505,103
03	362,857	79,831	55,340	54,887	54,887	54,887	54,887	54,887	54,887	54,887	54,887
04	98,094	19,831	78,278	79,623	79,623	79,623	79,623	79,623	79,623	79,623	79,623
05	58,268	28,679	11,546	11,546	11,546	11,546	11,546	11,546	11,546	11,546	11,546
06	60,391	24,302	63,269	63,269	63,269	100,202	111,096	132,507	148,484	148,484	148,484
07	48,666	-	-	-	-	-	-	-	440	440	440
08	48,825	-	-	-	-	-	-	-	-	-	-
09	57,944	11,096	11,096	11,096	11,096	11,096	11,096	11,096	11,096	11,096	
10	50,384	-	-	-	-	1,217	1,217	1,217	1,217		
11	56,401	-	-	-	-	-	-	-			
12	392,236	460,298	688,913	734,939	619,528	619,528	619,528				
13	424,881	415,686	407,219	456,203	456,203	456,203					
14	714,332	22,738	21,009	21,009	21,009						
15	716,848	27,135	27,135	27,135							
16	435,711	855	855								
17	451,123	17,822									

DELAWARE COMPENSATION RATING BUREAU
"F" CLASS UNIT STATISTICAL PLAN EXPERIENCE
REPORTED STANDARD EARNED PREMIUM AND MEDICAL INCURRED LOSSES

Policy Year	Standard Earned Premium	Reported Medical Incurred Losses Report Level									
		1	2	3	4	5	6	7	8	9	10
02	350,922	100,501	155,214	148,338	185,603	187,894	187,889	187,889	187,889	187,889	187,889
03	362,857	56,385	50,531	42,175	42,175	43,551	43,551	43,551	62,530	62,530	62,530
04	98,094	53,461	59,659	55,932	56,807	56,807	56,807	56,807	56,807	56,807	56,807
05	58,268	37,037	34,694	34,694	34,694	34,694	34,694	34,694	34,694	34,694	34,694
06	60,391	36,593	63,593	82,957	81,768	75,628	84,886	92,386	94,664	94,664	94,664
07	48,666	-	-	-	-	-	-	-	25,861	25,861	25,861
08	48,825	-	-	-	-	-	-	375	375	375	375
09	57,944	37,131	37,131	37,131	37,131	37,131	38,633	38,633	38,633	38,633	
10	50,384	-	-	-	-	3,735	3,735	3,735	3,735		
11	56,401	39	39	39	39	39	39	39			
12	392,236	128,335	214,965	263,895	249,833	249,833	249,833				
13	424,881	126,996	175,831	177,772	177,767	177,767					
14	714,332	29,757	29,757	29,757	29,757						
15	716,848	19,685	19,685	19,685							
16	435,711	3,547	3,547								
17	451,123	19,888									

DELAWARE COMPENSATION RATING BUREAU
"F" CLASS UNIT STATISTICAL PLAN EXPERIENCE
INDEMNITY INCURRED LOSS DEVELOPMENT FACTORS

Age-to-Age Development Factors

Policy Year	Report									
	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	6 - 7	7 - 8	8 - 9	9 - 10	10 - ULT
02	3.5034	****	1.8358	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
03	0.6932	0.9918	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
04	3.9473	1.0172	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
05	0.4026	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
06	****	1.0000	1.0000	1.5837	1.1087	1.1927	1.1206	1.0000	1.0000	
07	*	*	*	*	*	*	****	1.0000	1.0000	
08	*	*	*	*	*	*	*	*	*	
09	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		
10	*	*	*	****	1.0000	1.0000	1.0000			
11	*	*	*	*	*	*				
12	1.4967	1.0668	0.8430	1.0000	1.0000					
13	0.9796	1.1203	1.0000	1.0000						
14	0.9240	1.0000	1.0000							
15	1.0000	1.0000								
16	1.0000									
3 Yr Weighted Average	0.9659	1.1076	0.9048	1.0000	1.0000	1.1735	1.1103	1.0000	1.0000	
Weighted Avg (All available)	1.4708	1.0703	1.0671	1.0205	1.0079	1.0276	1.0201	1.0000	1.0000	
Selected (All available)	1.4706	1.0752	1.0475	1.0346	1.0247	1.0167	1.0102	1.0047	1.0001	1.0000

Development Factors to Ultimate

	1-ULT	2-ULT	3-ULT	4-ULT	5-ULT	6-ULT	7-ULT	8-ULT	9-ULT	10-ULT
3 Yr Weighted Average										
Weighted Avg (All available)	1.8113	1.2315	1.1506	1.0783	1.0566	1.0483	1.0201	1.0000	1.0000	1.0000
Selected (All available)	1.8122	1.2323	1.1461	1.0941	1.0575	1.0320	1.0150	1.0048	1.0001	1.0000

* No reported losses.

**** Loss development factor not used

DELAWARE COMPENSATION RATING BUREAU
"F" CLASS UNIT STATISTICAL PLAN EXPERIENCE
MEDICAL INCURRED LOSS DEVELOPMENT FACTORS

Age-to-Age Development Factors

Policy Year	Report									
	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	6 - 7	7 - 8	8 - 9	9 - 10	10 - ULT
02	1.5444	0.9557	1.2512	1.0123	1.0000	1.0000	1.0000	1.0000	1.0000	
03	0.8962	0.8346	1.0000	1.0326	1.0000	1.0000	1.4358	1.0000	1.0000	
04	1.1159	0.9375	1.0156	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
05	0.9367	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
06	1.7378	1.3045	0.9857	0.9249	1.1224	1.0884	1.0247	1.0000	1.0000	
07	*	*	*	*	*	*	****	1.0000	1.0000	
08	*	*	*	*	*	****	1.0000	1.0000	1.0000	
09	1.0000	1.0000	1.0000	1.0000	****	1.0000	1.0000	1.0000		
10	*	*	*	****	1.0000	1.0000	1.0000			
11	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000				
12	1.6750	1.2276	0.9467	1.0000	1.0000					
13	1.3845	1.0110	1.0000	1.0000						
14	1.0000	1.0000	1.0000							
15	1.0000	1.0000								
16	1.0000									
3 Yr Weighted Average	1.0000	1.0086	0.9702	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Weighted Avg (All available)	1.3418	1.0610	1.0262	0.9971	1.0142	1.0167	1.0464	1.0000	1.0000	
Selected (All available)	1.3421	1.0573	1.0247	1.0167	1.0140	1.0128	1.0122	1.0119	1.0117	1.0000

Development Factors to Ultimate

	1-ULT	2-ULT	3-ULT	4-ULT	5-ULT	6-ULT	7-ULT	8-ULT	9-ULT	10-ULT
3 Yr Weighted Average										
Weighted Avg (All available)	1.5717	1.1713	1.1040	1.0758	1.0789	1.0638	1.0464	1.0000	1.0000	1.0000
Selected (All available)	1.5732	1.1722	1.1087	1.0820	1.0642	1.0495	1.0362	1.0237	1.0117	1.0000

* No reported losses.

**** Loss development factor not used

DELAWARE COMPENSATION RATING BUREAU, INC.

"F" CLASS UNIT STATISTICAL PLAN EXPERIENCE

FITTED DEVELOPMENT FACTORS

INDEMNITY INCURRED LOSSES

$$Y = a + b/x + c/x^2 + d/x^3$$

$$a = (0.0503)$$

$$b = 0.5772$$

$$c = (1.2487)$$

$$d = 1.1924$$

$$R^2 = 0.9938$$

<u>Incurred Development</u>	<u>All Year Average</u>	<u>All Year Average - 1</u>	<u>Fitted Value</u>	<u>Fitted Value + 1</u>	<u>Selected</u>
1st to 2nd	1.4708	0.4708	0.4706	1.4706	1.4706
2nd to 3rd	1.0703	0.0703	0.0752	1.0752	1.0752
3rd to 4th	1.0671	0.0671	0.0475	1.0475	1.0475
4th to 5th	1.0205	0.0205	0.0346	1.0346	1.0346
5th to 6th	1.0079	0.0079	0.0247	1.0247	1.0247
6th to 7th	1.0276	0.0276	0.0167	1.0167	1.0167
7th to 8th	1.0201	0.0201	0.0102	1.0102	1.0102
8th to 9th	1.0000	-	0.0047	1.0047	1.0047
9th to 10th	1.0000	-	0.0001	1.0001	1.0001
10th to Ultimate					1.0000 *

* Selected

DELAWARE COMPENSATION RATING BUREAU, INC.

"F" CLASS UNIT STATISTICAL PLAN EXPERIENCE

FITTED DEVELOPMENT FACTORS

MEDICAL INCURRED LOSSES

$$Y = a + b/x^{1.5} + c \cdot \ln(x)/x^2$$

$$a = 0.0105$$

$$b = 0.3317$$

$$c = (0.406752)$$

$$R^2 = 0.9805$$

<u>Incurred Development</u>	<u>All Year Average</u>	<u>All Year Average - 1</u>	<u>Fitted Value</u>	<u>Fitted Value + 1</u>	<u>Selected</u>
1st to 2nd	1.3418	0.3418	0.3421	1.3421	1.3421
2nd to 3rd	1.0610	0.0610	0.0573	1.0573	1.0573
3rd to 4th	1.0262	0.0262	0.0247	1.0247	1.0247
4th to 5th	0.9971	(0.0029)	0.0167	1.0167	1.0167
5th to 6th	1.0142	0.0142	0.0140	1.0140	1.0140
6th to 7th	1.0167	0.0167	0.0128	1.0128	1.0128
7th to 8th	1.0464	0.0464	0.0122	1.0122	1.0122
8th to 9th	1.0000	-	0.0119	1.0119	1.0119
9th to 10th	1.0000	-	0.0117	1.0117	1.0117
10th to Ultimate					1.0000 *

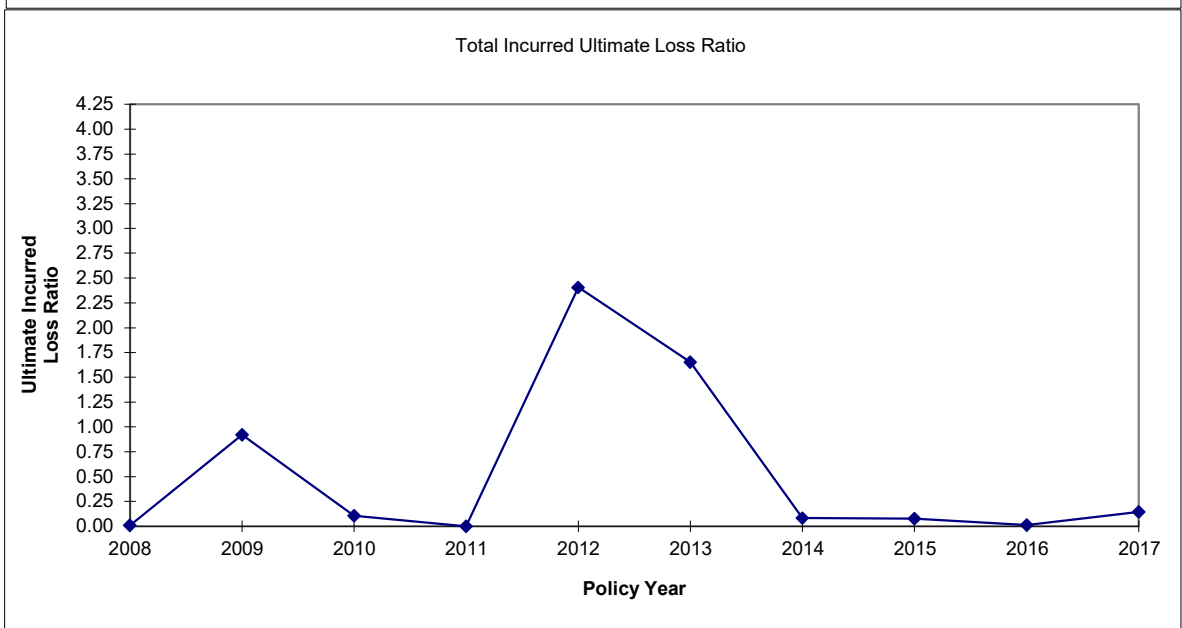
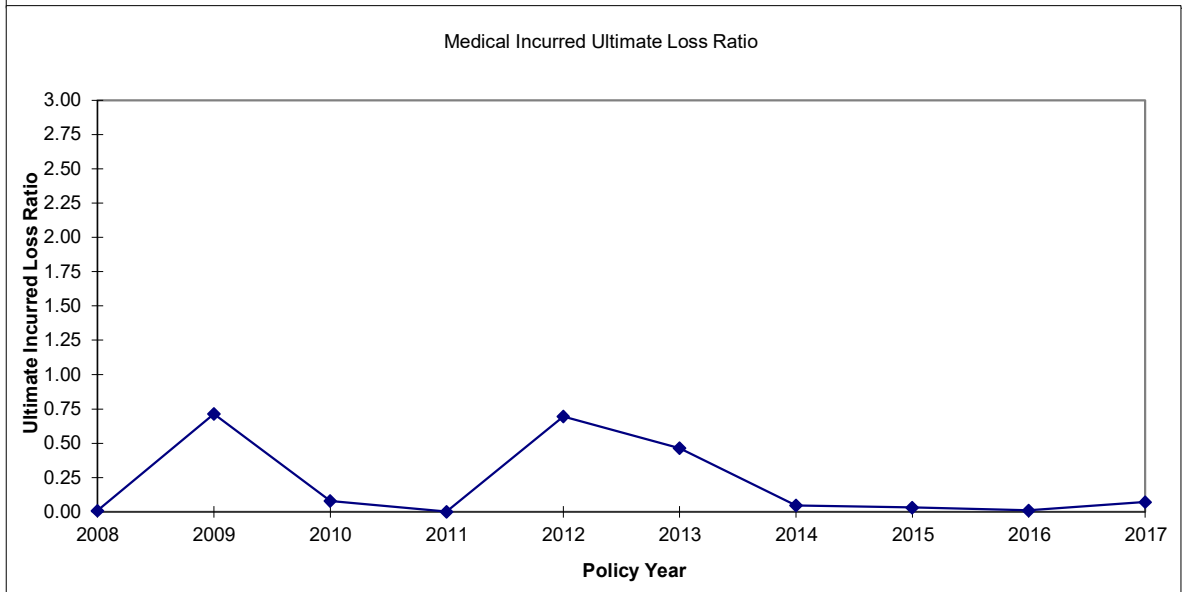
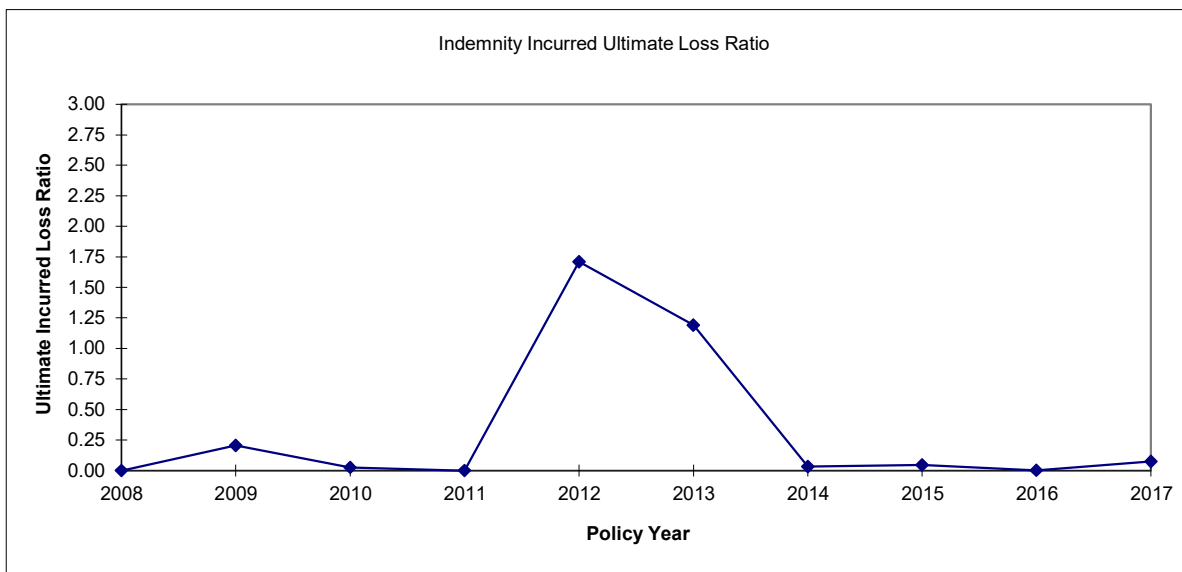
* Selected

DELAWARE COMPENSATION RATING BUREAU

"F" CLASS UNIT STATISTICAL PLAN EXPERIENCE

ULTIMATE LOSS RATIOS

	Policy Year	Standard Earned Premium	Premium On-Level Factor	Adjusted Premium	Reported Incurred Loss	Report Level	Loss Development Factor	Benefit On-Level Factor	Ultimate Incurred Loss	Loss Ratio
		(1)	(2)	(3) = (1) * (2)	(4)	(5)	(6)	(7)	(8)=(4)*(6)*(7)	(9)=(8)/(3)
Indemnity	2008	48,825	0.9959	48,625	0	10	1.0000	1.0119	0	0.0000
	2009	57,944	0.9447	54,740	11,096	9	1.0001	1.0096	11,204	0.2047
	2010	50,384	0.9459	47,658	1,217	8	1.0048	1.0090	1,234	0.0259
	2011	56,401	0.9619	54,252	0	7	1.0150	1.0101	0	0.0000
	2012	392,236	0.9619	377,292	619,528	6	1.0320	1.0099	645,682	1.7114
	2013	424,881	0.9619	408,693	456,203	5	1.0575	1.0090	486,777	1.1911
	2014	714,332	0.9619	687,116	21,009	4	1.0941	1.0081	23,172	0.0337
	2015	716,848	0.9619	689,536	27,135	3	1.1461	1.0073	31,326	0.0454
	2016	435,711	0.9619	419,110	855	2	1.2323	1.0064	1,060	0.0025
	2017	451,123	0.9619	433,935	17,822	1	1.8122	1.0053	32,468	0.0748
10 Year Total		3,348,685		3,220,957	1,154,865				1,232,923	0.3828
Medical	2008	48,825	0.9959	48,625	375	10	1.0000		375	0.0077
	2009	57,944	0.9447	54,740	38,633	9	1.0117		39,085	0.7140
	2010	50,384	0.9459	47,658	3,735	8	1.0237		3,824	0.0802
	2011	56,401	0.9619	54,252	39	7	1.0362		40	0.0007
	2012	392,236	0.9619	377,292	249,833	6	1.0495		262,200	0.6950
	2013	424,881	0.9619	408,693	177,767	5	1.0642		189,180	0.4629
	2014	714,332	0.9619	687,116	29,757	4	1.0820		32,197	0.0469
	2015	716,848	0.9619	689,536	19,685	3	1.1087		21,825	0.0317
	2016	435,711	0.9619	419,110	3,547	2	1.1722		4,158	0.0099
	2017	451,123	0.9619	433,935	19,888	1	1.5732		31,288	0.0721
10 Year Total		3,348,685		3,220,957	543,259				584,172	0.1814
Total	2008	48,825	0.9959	48,625	375	10			375	0.0077
	2009	57,944	0.9447	54,740	49,729	9			50,289	0.9187
	2010	50,384	0.9459	47,658	4,952	8			5,058	0.1061
	2011	56,401	0.9619	54,252	39	7			40	0.0007
	2012	392,236	0.9619	377,292	869,361	6			907,882	2.4063
	2013	424,881	0.9619	408,693	633,970	5			675,957	1.6539
	2014	714,332	0.9619	687,116	50,766	4			55,369	0.0806
	2015	716,848	0.9619	689,536	46,820	3			53,151	0.0771
	2016	435,711	0.9619	419,110	4,402	2			5,218	0.0125
	2017	451,123	0.9619	433,935	37,710	1			63,756	0.1469
10 Year Total		3,348,685		3,220,957	1,698,124				1,817,095	0.5641



		3 points	4 points	5 points	6 points	7 points	8 points	9 points	10 points
INDEMNITY									
LINEAR	Weighted Avg Loss Ratio	0.0420	0.0395	0.2179	0.4047	0.3976	0.3919	0.3886	0.3828
	Trended Loss Ratio	0.0985	0.0746	(0.8435)	(1.3067)	(0.4799)	(0.0575)	0.1146	0.2811
	Trend Factor	2.3429	1.8896	(3.8717)	(3.2287)	(1.2071)	(0.1467)	0.2949	0.7344
	Annual. Trend Factor	1.1548	1.0964	NA	NA	NA	NA	0.9026	0.9764
	R^2	0.1635	0.1205	0.4815	0.7036	0.2227	0.0632	0.0247	0.0010
EXPONENTIAL	Trended Loss Ratio	0.0542	0.0185	0.0009	0.0005	NA	NA	NA	NA
	Trend Factor	1.2892	0.4686	0.0041	0.0012	NA	NA	NA	NA
	Annual. Trend Factor	1.0439	0.8962	0.4994	0.4704	NA	NA	NA	NA
	R^2	0.0185	0.0019	0.3421	0.5521	NA	NA	NA	NA
MEDICAL									
LINEAR	Weighted Avg Loss Ratio	0.0371	0.0401	0.1056	0.1793	0.1762	0.1747	0.1840	0.1814
	Trended Loss Ratio	0.1170	0.0639	(0.2778)	(0.4749)	(0.1469)	(0.0097)	(0.1530)	0.0015
	Trend Factor	3.1514	1.5925	(2.6304)	(2.6480)	(0.8338)	(0.0555)	(0.8314)	0.0083
	Annual. Trend Factor	1.2141	1.0696	NA	NA	NA	NA	NA	0.6901
	R^2	0.4097	0.0705	0.4621	0.6918	0.1968	0.0744	0.2600	0.0861
EXPONENTIAL	Trended Loss Ratio	0.1414	0.0339	0.0041	0.0023	0.0750	0.0492	0.0185	0.0455
	Trend Factor	3.8086	0.8448	0.0388	0.0128	0.4257	0.2816	0.1005	0.2509
	Annual. Trend Factor	1.2536	0.9759	0.6634	0.6134	0.9175	0.8904	0.8246	0.8985
	R^2	0.1696	0.0004	0.3530	0.5826	0.0080	0.0002	0.0462	0.0003
TOTAL									
LINEAR	Weighted Avg Loss Ratio	0.0792	0.0796	0.3235	0.5841	0.5737	0.5666	0.5727	0.5641
	Trended Loss Ratio	0.2155	0.1385	(1.1213)	(1.7816)	(0.6268)	(0.0672)	(0.0384)	0.2826
EXPONENTIAL	Trended Loss Ratio	0.1956	0.0524	0.0050	0.0028	NA	NA	NA	NA