

PENNSYLVANIA COMPENSATION RATING BUREAU
F CLASS FILING

ANALYSIS OF EXPERIENCE

The following pages present an analysis of Pennsylvania “F” class experience. The analysis is based on data reported to the Bureau 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 seven year average, or all available points if fewer than seven were available, for indemnity and medical 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 - Pages 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 $y = a * (1 + x)^b$ for indemnity and $y = 1 / (a + b*x)$ for medical. A value of 1.0000 was selected from the 14th-to-15th development stage to ensure a more reasonable shape for the final fitted curve. The 10th-to-ultimate factor was then calculated by compounding the age-to-age factors for 10th-to-11th and all subsequent development stages through the 15th report. These factors became the “selected” values on pages 3 and 4.

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 1998 through 2007 are shown on page 8.

Trend Summary - Ultimate loss ratios were then fitted to both a linear and experimental curve to project a loss ratio for the prospective rating period. A summary of these results are shown on page 9.

PENNSYLVANIA 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
92	8,224,657	1,685,379	2,634,208	3,008,151	3,529,773	4,244,023	4,212,388	4,329,719	4,494,702	3,917,997	3,865,290
93	8,868,022	940,865	1,776,487	2,104,171	3,036,597	3,237,829	4,037,056	3,898,149	2,295,835	2,276,985	2,276,985
94	8,613,777	2,017,088	3,072,208	3,229,962	3,208,208	2,995,170	3,167,237	2,443,570	2,474,752	2,483,655	2,465,136
95	9,317,313	518,260	1,106,477	1,403,489	916,600	1,123,965	1,144,298	987,901	1,052,159	892,189	892,191
96	10,841,351	1,628,776	2,237,575	2,717,205	3,471,694	4,897,966	4,493,113	4,383,289	4,370,894	4,466,226	4,194,215
97	6,729,291	1,665,526	2,517,585	2,932,035	2,936,181	2,959,307	3,143,129	2,838,081	2,838,080	2,838,080	3,012,679
98	11,198,940	2,189,207	2,741,853	1,455,480	1,638,418	1,655,549	2,145,803	1,734,303	1,752,606	1,752,606	1,752,606
99	7,004,741	2,278,068	1,444,801	1,491,375	1,545,642	1,413,730	1,525,607	1,578,164	1,500,805	1,500,805	
00	10,673,321	968,974	2,575,955	3,013,038	3,243,897	3,259,124	3,385,904	3,322,367	3,322,367		
01	16,185,988	1,167,275	2,142,613	2,358,411	2,720,696	3,100,357	3,409,132	3,862,772			
02	18,811,734	1,334,807	1,840,111	2,309,583	2,603,880	2,645,245	2,940,184				
03	9,703,002	1,654,185	2,378,806	3,594,256	4,307,912	4,693,497					
04	5,412,095	1,206,032	2,063,556	2,214,772	2,227,923						
05	4,247,161	1,180,618	1,163,588	1,682,054							
06	6,083,961	1,874,241	2,934,179								
07	4,814,279	718,634									

PENNSYLVANIA 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									
		1	2	3	4	5	6	7	8	9	10
92	8,224,657	N/A	1,812,421	1,935,990	1,916,581	1,932,640	1,911,973	2,045,167	2,010,746	1,846,221	1,847,310
93	8,868,022	728,812	869,522	892,078	885,089	885,909	986,696	962,534	819,731	808,091	859,042
94	8,613,777	1,069,047	1,240,181	1,125,320	1,033,314	1,133,446	995,970	835,115	865,115	857,908	842,005
95	9,317,313	342,845	430,150	445,861	417,162	495,125	528,071	517,446	720,412	492,852	N/A
96	10,841,351	691,917	834,832	835,823	914,477	1,220,308	1,246,665	1,383,436	1,165,611	1,067,852	1,060,852
97	6,729,291	840,133	1,020,538	917,578	871,202	863,085	877,234	1,041,526	1,041,526	1,041,526	879,526
98	11,198,940	3,005,891	2,084,986	1,484,608	1,461,769	1,442,004	2,078,423	1,308,839	1,141,665	1,141,665	1,141,665
99	7,004,741	1,102,392	277,212	281,541	260,139	256,350	260,301	265,301	265,601	265,601	
00	10,673,321	577,870	751,041	975,821	1,166,316	1,259,843	1,333,519	1,330,827	1,302,339		
01	16,185,988	599,903	1,077,410	1,140,050	1,167,045	1,307,657	1,235,261	1,365,092			
02	18,811,734	688,788	764,960	902,425	876,765	907,488	1,199,766				
03	9,703,002	1,186,330	1,360,549	1,431,650	1,482,740	1,470,197					
04	5,412,095	793,110	984,276	1,070,624	1,126,241						
05	4,247,161	619,947	499,031	552,839							
06	6,083,961	1,132,127	1,644,156								
07	4,814,279	525,340									

PENNSYLVANIA 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
92	****	1.1420	1.1734	1.2024	0.9925	****	1.0381	****	0.9865	
93	1.8881	1.1845	****	1.0663	****	0.9656	****	0.9918	1.0000	
94	1.5231	****	0.9933	0.9336	1.0574	****	1.0128	1.0036	0.9925	
95	****	1.2684	0.6531	1.2262	****	0.8633	1.0650	0.8480	1.0000	
96	1.3738	****	1.2777	****	0.9173	0.9756	0.9972	1.0218	0.9391	
97	****	1.1646	****	1.0079	1.0621	0.9029	1.0000	1.0000	1.0615	
98	1.2524	****	1.1257	1.0105	1.2961	0.8082	1.0106	1.0000	1.0000	
99	****	1.0322	1.0364	0.9147	1.0791	1.0344	0.9510	1.0000		
00	2.6584	****	1.0766	1.0047	1.0389	0.9812	1.0000			
01	****	1.1007	****	1.1395	1.0996	1.1331				
02	1.3786	****	1.1274	1.0159	1.1115					
03	1.4381	1.5109	1.1986	1.0895						
04	1.7110	1.0733	1.0059							
05	0.9856	1.4456								
06	1.5655									
3 Yr Avg (Latest 3)	1.4207	1.3433	1.1106	1.0816	1.0833	1.0496	0.9872	1.0000	1.0002	
5 Yr Avg	1.4158	1.2325	1.0890	1.0329	1.1250	0.9720	0.9918	0.9740	0.9986	
7 Yr Avg	1.5699	1.2280	1.1212	1.0261	1.0864	0.9570	1.0052	0.9807	0.9971	
Selected (Fitted)	1.5760	1.2086	1.1015	1.0580	1.0367	1.0250	1.0179	1.0133	1.0102	1.0282

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 Avg (Latest 3)										
5 Yr Avg										
7 Yr Avg	2.3304	1.4844	1.2088	1.0781	1.0507	0.9671	1.0106	1.0054	1.0252	1.0282
Selected	2.5273	1.6036	1.3268	1.2046	1.1385	1.0981	1.0713	1.0525	1.0387	1.0282

* Based on selected value

**** Loss development factor not used

PENNSYLVANIA COMPENSATION RATING BUREAU

"F" CLASS UNIT STATISTICAL PLAN EXPERIENCE

MEDICAL INCURRED LOSS DEVELOPMENT FACTORS

Age-to-Age Development Factors

Policy Year	Report									10 - ULT
	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	6 - 7	7 - 8	8 - 9	9 - 10	
92	****	1.0682	0.9900	1.0084	0.9893	****	0.9832	****	1.0006	
93	1.1931	1.0259	****	1.0009	****	0.9755	****	0.9858	1.0631	
94	1.1601	****	0.9182	****	0.8787	****	1.0359	0.9917	0.9815	
95	****	1.0365	0.9356	1.1869	****	0.9799	1.3922	0.6841	****	
96	1.2065	****	1.0941	****	1.0216	1.1097	0.8425	0.9161	0.9934	
97	****	0.8991	****	0.9907	1.0164	1.1873	1.0000	1.0000	0.8445	
98	0.6936	****	0.9846	0.9865	1.4413	0.6297	0.8723	1.0000	1.0000	
99	****	1.0156	0.9240	0.9854	1.0154	1.0192	1.0011	1.0000		
00	1.2997	****	1.1952	1.0802	1.0585	0.9980	0.9786			
01	****	1.0581	****	1.1205	0.9446	1.1051				
02	1.1106	****	0.9716	1.0350	1.3221					
03	1.1469	1.0523	1.0357	0.9915						
04	1.2410	1.0877	1.0519							
05	0.8050	1.1078								
06	1.4523									
3 Yr Avg (Latest 3)	1.1661	1.0826	1.0197	1.0490	1.1084	1.0408	0.9507	1.0000	0.9460	
5 Yr Avg	1.1512	1.0643	1.0357	1.0425	1.1564	0.9879	0.9389	0.9200	0.9549	
7 Yr Avg	1.1070	1.0367	1.0367	1.0271	1.1171	1.0041	1.0175	0.9397	0.9805	
Selected (Fitted)	1.1058	1.0513	1.0338	1.0253	1.0201	1.0168	1.0143	1.0125	1.0111	1.0429

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 Avg (Latest 3)										
5 Yr Avg										
7 Yr Avg	1.3401	1.2106	1.1677	1.1264	1.0967	0.9817	0.9777	0.9609	1.0226	1.0429
Selected	1.3841	1.2517	1.1906	1.1517	1.1233	1.1012	1.0830	1.0677	1.0545	1.0429

* Based on selected value

**** Loss development factor not used

PENNSYLVANIA COMPENSATION RATING BUREAU

"F" CLASS UNIT STATISTICAL PLAN EXPERIENCE

FITTED DEVELOPMENT FACTORS

INDEMNITY INCURRED LOSSES

$$Y = a*(1+x)^b$$

$$a = 3.26986$$

$$b = (2.50507)$$

$$R^2 = 0.9622$$

<u>Incurred Development</u>	<u>7 Year Average</u>	<u>7 Year Average - 1</u>	<u>Fitted Value</u>	<u>Fitted Value + 1</u>
1 1st to 2nd	1.5699	0.5699	0.5760	1.5760
2 2nd to 3rd	1.2280	0.2280	0.2086	1.2086
3 3rd to 4th	1.1212	0.1212	0.1015	1.1015
4 4th to 5th	1.0261	0.0261	0.0580	1.0580
5 5th to 6th	1.0864	0.0864	0.0367	1.0367
6 6th to 7th	0.9570	(0.0430)	0.0250	1.0250
7 7th to 8th	1.0052	0.0052	0.0179	1.0179
8 8th to 9th	0.9807	(0.0193)	0.0133	1.0133
9 9th to 10th	0.9971	(0.0029)	0.0102	1.0102
10 10th to 11th			0.0080	1.0080
11 11th to 12th			0.0065	1.0065
12 12th to 13th			0.0053	1.0053
13 13th to 14th			0.0044	1.0044
14 14th to 15th	1.0000	-	0.0037	1.0037
10th to Ultimate				1.0282

(a) 14th to 15th age-to-age factor set at 1.0000 to ensure proper tendency for the fitted curve.

PENNSYLVANIA COMPENSATION RATING BUREAU

"F" CLASS UNIT STATISTICAL PLAN EXPERIENCE

FITTED DEVELOPMENT FACTORS

MEDICAL INCURRED LOSSES

$Y = 1/(a+b*x)$

a = (0.5981)

b = 10.0473

R ^ 2 = 0.2993

<u>Incurred Development</u>	<u>7 Year Average</u>	<u>7 Year Average - 1</u>	<u>Fitted Value</u>	<u>Fitted Value + 1</u>
1				
1 1st to 2nd	1.1070	0.1070	0.1058	1.1058
2 2nd to 3rd	1.0367	0.0367	0.0513	1.0513
3 3rd to 4th	1.0367	0.0367	0.0338	1.0338
4 4th to 5th	1.0271	0.0271	0.0253	1.0253
5 5th to 6th	1.1171	0.1171	0.0201	1.0201
6 6th to 7th	1.0041	0.0041	0.0168	1.0168
7 7th to 8th	1.0175	0.0175	0.0143	1.0143
8 8th to 9th	0.9397	(0.0603)	0.0125	1.0125
9 9th to 10th	0.9805	(0.0195)	0.0111	1.0111
10 10th to 11th			0.0100	1.0100
11 11th to 12th			0.0091	1.0091
12 12th to 13th			0.0083	1.0083
13 13th to 14th			0.0077	1.0077
14 14th to 15th	1.0000	-	0.0071	1.0071
10th to Ultimate				1.0429

(a) 14th to 15th age-to-age factor set at 1.0000 to ensure proper tendency for the fitted curve.

PENNSYLVANIA COMPENSATION RATING BUREAU

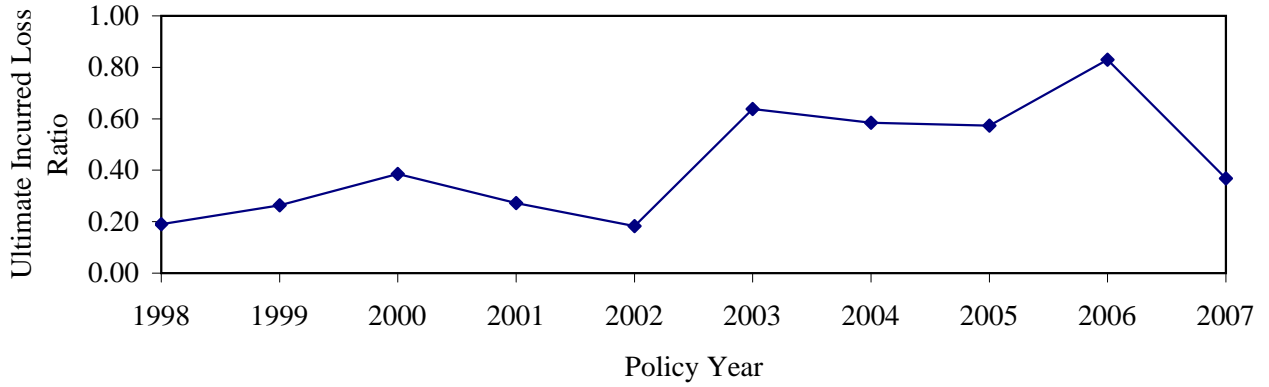
"F" CLASS UNIT STATISTICAL PLAN EXPERIENCE

ULTIMATE LOSS RATIOS

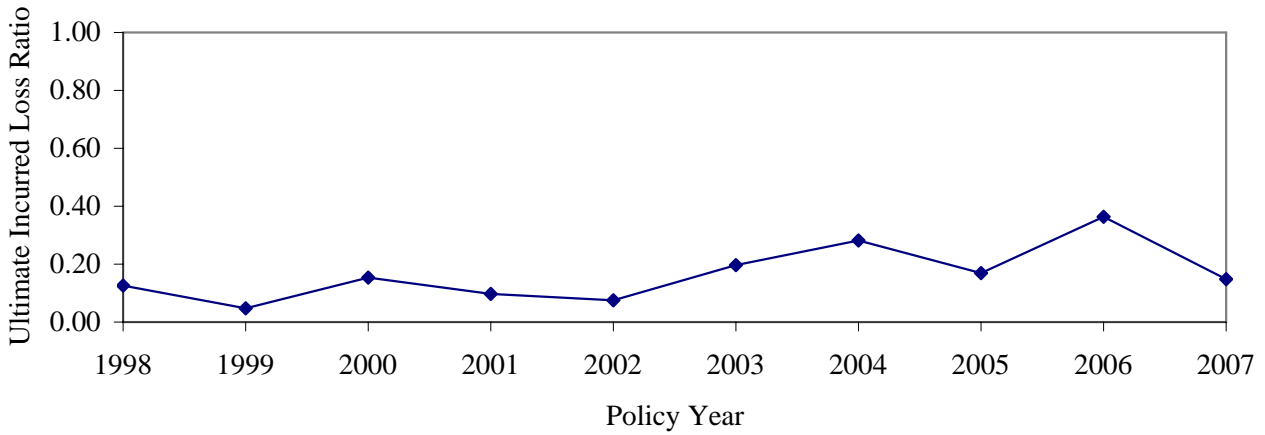
Policy Year	Standard Earned Premium (1)	Premium On-Level Factor (2)	Adjusted Premium (3)	Reported Incurred Loss (4)	Loss Level (5)	Loss Development Factor (6)	Ultimate Incurred Loss (7)=(4)*(6)	Loss Ratio (8)=(7)/(3)
Indemnity								
98	11,198,940	0.8439	9,450,785	1,752,606	10	1.0282	1,802,029	0.1907
99	7,004,741	0.8439	5,911,301	1,500,805	9	1.0387	1,558,886	0.2637
00	10,673,321	0.8496	9,068,054	3,322,367	8	1.0525	3,496,791	0.3856
01	16,185,988	0.9384	15,188,931	3,862,772	7	1.0713	4,138,188	0.2724
02	18,811,734	0.9384	17,652,931	2,940,184	6	1.0981	3,228,616	0.1829
03	9,703,002	0.8635	8,378,542	4,693,497	5	1.1385	5,343,546	0.6378
04	5,412,095	0.8491	4,595,410	2,227,923	4	1.2046	2,683,756	0.5840
05	4,247,161	0.9162	3,891,249	1,682,054	3	1.3268	2,231,749	0.5735
06	6,083,961	0.9318	5,669,035	2,934,179	2	1.6036	4,705,249	0.8300
07	4,814,279	1.0233	4,926,452	718,634	1	2.5273	1,816,204	0.3687
10 Year Total	94,135,222		84,732,690	25,635,021			31,005,014	0.3659
4 Year Average								0.5891
Medical								
98	11,198,940	0.8439	9,450,785	1,141,665	10	1.0429	1,190,642	0.1260
99	7,004,741	0.8439	5,911,301	265,601	9	1.0545	280,076	0.0474
00	10,673,321	0.8496	9,068,054	1,302,339	8	1.0677	1,390,507	0.1533
01	16,185,988	0.9384	15,188,931	1,365,092	7	1.0830	1,478,395	0.0973
02	18,811,734	0.9384	17,652,931	1,199,766	6	1.1012	1,321,182	0.0748
03	9,703,002	0.8635	8,378,542	1,470,197	5	1.1233	1,651,472	0.1971
04	5,412,095	0.8491	4,595,410	1,126,241	4	1.1517	1,297,092	0.2823
05	4,247,161	0.9162	3,891,249	552,839	3	1.1906	658,210	0.1692
06	6,083,961	0.9318	5,669,035	1,644,156	2	1.2517	2,057,990	0.3630
07	4,814,279	1.0233	4,926,452	525,340	1	1.3841	727,123	0.1476
10 Year Total	94,135,222		84,732,690	10,593,236			12,052,689	0.1422
4 Year Average								0.2405
Total								
98	11,198,940	0.8439	9,450,785	2,894,271			2,992,671	0.3167
99	7,004,741	0.8439	5,911,301	1,766,406			1,838,962	0.3111
00	10,673,321	0.8496	9,068,054	4,624,706			4,887,298	0.5390
01	16,185,988	0.9384	15,188,931	5,227,864			5,616,583	0.3698
02	18,811,734	0.9384	17,652,931	4,139,950			4,549,798	0.2577
03	9,703,002	0.8635	8,378,542	6,163,694			6,995,018	0.8349
04	5,412,095	0.8491	4,595,410	3,354,164			3,980,848	0.8663
05	4,247,161	0.9162	3,891,249	2,234,893			2,889,959	0.7427
06	6,083,961	0.9318	5,669,035	4,578,335			6,763,239	1.1930
07	4,814,279	1.0233	4,926,452	1,243,974			2,543,327	0.5163
10 Year Total	94,135,222		84,732,690	36,228,257			43,057,703	0.5082
4 Year Average								0.8296

Pennsylvania "F" Class

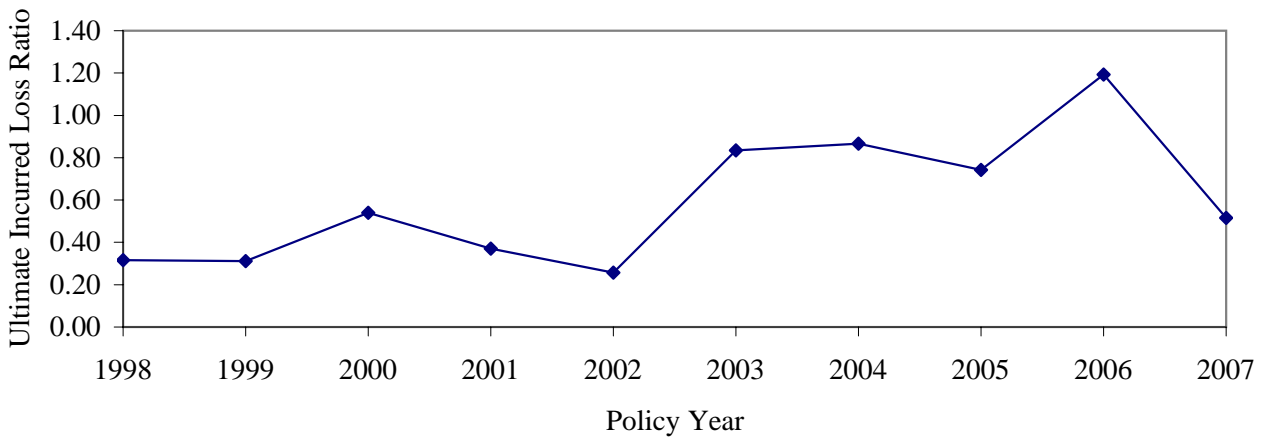
Indemnity Ultimate Incurred Loss Ratio



Medical Ultimate Incurred Loss Ratio



Total Ultimate Incurred Loss Ratio



		3 points	4 points	5 points	6 points	7 points	8 points	9 points	10 points
INDEMNITY									
LINEAR	Average Loss Ratio	0.5907	0.5891	0.5988	0.5295	0.4928	0.4794	0.4554	0.4289
	Trended Loss Ratio	0.1726	0.4106	0.4503	0.7680	0.8227	0.7762	0.7808	0.7918
	Trend Factor	0.2922	0.6970	0.7520	1.4504	1.6694	1.6191	1.7145	1.8461
	Annual. Trend Factor	0.8169	0.9503	0.9654	1.0418	1.0521	1.0444	1.0456	1.0480
EXPONENTIAL	R ²	0.1963	0.0709	0.0785	0.1263	0.2661	0.2672	0.3508	0.4455
	Trended Loss Ratio	0.2272	0.3561	0.3969	0.9461	1.0134	0.8511	0.8627	0.9309
	Trend Factor	0.3846	0.6045	0.6628	1.7868	2.0564	1.7753	1.8944	2.1704
	Annual. Trend Factor	0.8546	0.9314	0.9504	1.0660	1.0741	1.0532	1.0543	1.0610
	R ²	0.2956	0.1539	0.1617	0.1801	0.3036	0.2531	0.3367	0.4622
MEDICAL									
LINEAR	Average Loss Ratio	0.2266	0.2405	0.2318	0.2057	0.1902	0.1856	0.1702	0.1658
	Trended Loss Ratio	0.1825	0.1441	0.2225	0.3251	0.3421	0.3154	0.3333	0.3111
	Trend Factor	0.8054	0.5992	0.9599	1.5805	1.7986	1.6994	1.9583	1.8764
	Annual. Trend Factor	0.9651	0.9302	0.9949	1.0517	1.0599	1.0490	1.0572	1.0493
EXPONENTIAL	R ²	0.0083	0.0726	0.0010	0.1524	0.2791	0.2562	0.3937	0.3668
	Trended Loss Ratio	0.1578	0.1308	0.1855	0.3888	0.4219	0.3384	0.4455	0.3618
	Trend Factor	0.6964	0.5439	0.8003	1.8901	2.2182	1.8233	2.6175	2.1821
	Annual. Trend Factor	0.9423	0.9176	0.9728	1.0726	1.0822	1.0557	1.0829	1.0615
	R ²	0.0198	0.1296	0.0193	0.2099	0.3483	0.2658	0.4685	0.3830
TOTAL									
LINEAR	Average Loss Ratio	0.8173	0.8296	0.8306	0.7352	0.6830	0.6650	0.6256	0.5947
	Trended Loss Ratio	0.3551	0.5547	0.6728	1.0931	1.1648	1.0916	1.1141	1.1029
EXPONENTIAL	Trended Loss Ratio	0.3850	0.4869	0.5824	1.3349	1.4353	1.1895	1.3082	1.2927