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.

<u>Reported Premium and Losses</u> - 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.

<u>Indicated Loss Development Factors</u> - Page 3 (indemnity) and page 4 (medical) show age-to-age development factors based on reported losses. All available years average 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.

<u>Selected Loss Development Factors</u> - 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 10th-to-11th 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. These factors became the "selected" values on pages 3 and 4.

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

<u>Graphs</u> - Indemnity, medical and total ultimate loss ratio graphs for policy years 1992 through 2001 are shown on page 8.

<u>Trend Summary</u> - 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.

"F" CLASS UNIT STATISTICAL PLAN EXPERIENCE

REPORTED STANDARD EARNED PREMIUM AND INDEMNITY INCURRED LOSSES

Policy	Standard Earned				F	•	nity Incurred Los	ses			
Year	Premium	1	2	3	4	5	6	7	8	9	10
88	3,577,883		1,104,767	1,062,101	1,270,511	1,404,271					
89	5,025,216	739,039	1,463,513	1,780,716	1,918,404		F				
90	6,197,957	1,440,017	2,396,047	3,346,275	3,033,571	3,653,345		3,543,484	3,668,661	3,789,394	3,806,984
91	7,069,911	2,519,152	3,159,721	5,180,276	5,288,473	5,140,334	5,325,289	5,445,084	5,964,871	5,639,210	5,778,198
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	4,514,327	4,461,621
93	8,868,022	940,865	1,776,487	2,104,171	3,036,597	3,237,829	4,037,056	3,898,149	3,049,481	3,030,631	
94	8,613,777	2,017,088	3,072,208	3,229,962	3,208,208	2,995,170	3,167,237	3,103,037	3,134,219		
95	9,317,313	518,260	1,106,477	1,403,489	916,600	1,123,965	1,190,197	1,033,800			
96	10,841,351	1,628,776	2,237,575	2,717,205	3,471,694	5,099,579	4,517,523				
97	6,729,291	1,665,526	2,517,585	2,932,035	2,999,049	3,022,175					
98	11,198,940	2,189,207	2,741,853	3,635,278	3,281,895						
99	13,636,610	2,278,068	4,389,831	3,443,905							
00	11,043,309	1,135,100	2,752,276								
01	16,316,252	2,156,519									

"F" CLASS UNIT STATISTICAL PLAN EXPERIENCE

REPORTED STANDARD EARNED PREMIUM AND MEDICAL INCURRED LOSSES

Policy	Standard Earned		Reported Medical Incurred Losses								
Year	Premium	1	2	3	4	5	6	7	8	9	10
88	3,577,883		417,789	428,172	440,026	458,451					
89	5,025,216	410,073	598,964	700,574	764,346		_		_		
90	6,197,957	866,108	1,179,772	1,505,424	1,539,693	1,448,816		1,389,184	1,381,063	1,409,910	1,420,843
91	7,069,911	1,464,722	1,760,432	2,194,949	2,304,753	2,279,595	2,246,879	2,313,108	2,395,676	2,233,861	2,246,305
92	8,224,657	1,324,644	1,725,261	1,848,169	1,828,378	1,846,771	1,825,230	1,958,424	1,924,003	1,974,653	1,976,328
93	8,868,022	662,636	801,635	823,492	819,314	819,568	920,355	896,193	897,988	886,407	
94	8,613,777	1,001,710	1,187,641	1,071,712	958,351	1,058,106	920,957	879,115	909,115		
95	9,317,313	321,942	409,250	422,749	394,452	472,415	510,918	500,033			
96	10,841,351	644,990	785,475	785,093	863,747	1,211,167	1,208,846				
97	6,729,291	775,865	972,104	872,839	866,830	858,713					
98	11,198,940	2,954,477	2,026,872	2,056,789	1,968,928						
99	13,636,610	1,045,998	1,244,551	941,493							
00	11,043,309	652,675	835,307								
01	16,316,252	952,538									

"F" CLASS UNIT STATISTICAL PLAN EXPERIENCE

INDEMNITY INCURRED LOSS DEVELOPMENT FACTORS

Age-to-Age Development Factors

Policy Year	1 - 2	2 - 3	3 - 4	4 - 5	F 5 - 6	Report 6 - 7	7 - 8	8 - 9	9 - 10	10 - ULT
88		0.9614	1.1962	1.1053						
89	1.9803	1.2167	1.0773	N/A						
90	1.6639	1.3966	****	1.2043			1.0353	****	1.0046	
91	1.2543	****	1.0209	0.9720	****	1.0225	1.0955	0.9454	1.0246	
92	****	1.1420	1.1734	1.2024	0.9925	****	1.0381	1.0044	0.9883	
93	1.8881	1.1845	****	1.0663	****	0.9656	0.7823	0.9938		
94	1.5231	****	0.9933	0.9336	1.0574	0.9797	1.0100			
95	****	1.2684	0.6531	1.2262	1.0589	0.8686				
96	1.3738	****	1.2777	1.4689	0.8859					
97	****	1.1646	1.0229	1.0077						
98	1.2524	1.3258	0.9028							
99	1.9270	0.7845								
00	2.4247									
3 Yr Avg (Latest 3)	1.8680	1.0916	1.0678	1.2343	1.0007	0.9380	0.9435	0.9812	1.0058	
4 Yr Avg	1.7445	1.1358	0.9641	1.1591	0.9987	0.9591	0.9815			
6 Yr Avg	1.7315	1.1450	1.0039	1.1509						
All Available Yr Avg	1.6986	1.1605	1.0353	1.1319	0.9987	0.9591	0.9922	0.9812	1.0058	
Selected (Fitted)	1.6974	1.1685	1.0615	1.0281	1.0149	1.0087	1.0054	1.0036	1.0025	1.0055
				Developm	ent 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)										
4 Yr Avg										
6 Yr Avg										
All Available Yr Avg	2.1786	1.2826	1.1052	1.0675	0.9431	0.9443	0.9846	0.9923	1.0113	1.0055
Selected	2.2538	1.3278	1.1363	1.0705	1.0412	1.0259	1.0171	1.0116	1.0080	1.0055

* Based on selected value

"F" CLASS UNIT STATISTICAL PLAN EXPERIENCE

MEDICAL INCURRED LOSS DEVELOPMENT FACTORS

Age-to-Age Development Factors

Policy			• •			Report				
Year	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	6 - 7	7 - 8	8 - 9	9 - 10	10 - ULT
88		1.0249	1.0277	1.0419						
89	1.4606	1.1696	1.0910	N/A						
90	1.3622	1.2760	****	0.9410		Г	0.9942	****	1.0078	
91	1.2019	****	1.0500	0.9891	****	1.0295	1.0357	0.9325	1.0056	
92	****	1.0712	0.9893	1.0101	0.9883	****	0.9824	1.0263	1.0008	
93	1.2098	1.0273	****	1.0003	****	0.9737	1.0020	0.9871		
94	1.1856	****	0.8942	****	0.8704	0.9546	1.0341			
95	****	1.0330	0.9331	1.1976	1.0815	0.9787				
96	1.2178	****	1.1002	1.4022	0.9981					
97	****	0.8979	0.9931	0.9906						
98	0.6860	1.0148	0.9573							
99	1.1898	0.7565								
00	1.2798									
3 Yr Avg (Latest 3)	1.0519	0.8897	1.0169	1.1968	0.9833	0.9690	1.0062	0.9820	1.0047	
4 Yr Avg	1.0934	0.9256	0.9959	1.1477	0.9846	0.9841	1.0136			
6 Yr Avg	1.1281	0.9668	0.9779	1.0983						
All Available Yr Avg	1.1993	1.0301	1.0040	1.0716	0.9846	0.9841	1.0097	0.9820	1.0047	
Selected (Fitted)	1.1993	1.0303	1.0164	1.0112	1.0085	1.0069	1.0058	1.0050	1.0044	1.0163
				Developm	ent 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)										
4 Yr Avg										
6 Yr Avg										
All Available Yr Avg	1.3039	1.0872	1.0554	1.0512	0.9810	0.9963	1.0124	1.0027	1.0211	1.0163
Selected	1.3306	1.1095	1.0769	1.0595	1.0478	1.0390	1.0319	1.0259	1.0208	1.0163

* Based on selected value

"F" CLASS UNIT STATISTICAL PLAN EXPERIENCE

FITTED DEVELOPMENT FACTORS

INDEMNITY INCURRED LOSSES

	Y = a*(1+x)^b	a = R ^ 2 =	7.9085 0.9620	b =	(3.5034)
Incurred Development	All Year Average	<u>All Year Average - 1</u>	Fitted Value	Fitted	d Value + 1
1 1st to 2nd	1.6986	0.6986	0.6974		1.6974
2 2nd to 3rd	1.1605	0.1605	0.1685		1.1685
3 3rd to 4th	1.0353	0.0353	0.0615		1.0615
4 4th to 5th	1.1319	0.1319	0.0281		1.0281
5 5th to 6th	0.9987	(0.0013)	0.0149		1.0149
6 6th to 7th	0.9591	(0.0409)	0.0087		1.0087
7 7th to 8th	0.9922	(0.0078)	0.0054		1.0054
8 8th to 9th	0.9812	(0.0188)	0.0036		1.0036
9 9th to 10th	1.0058	0.0058	0.0025		1.0025
10 10th to 11th	1.0000	-	0.0018		1.0018
11 11th to 12th			0.0013		1.0013
12 12th to 13th			0.0010		1.0010
13 13th to 14th			0.0008		1.0008
14 14th to 15th			0.0006		1.0006
10th to Ultimate					1.0055

(a) 10th to 11th age-to-age factor set at 1.0000 to ensure proper tendency for the fitted curve.

"F" CLASS UNIT STATISTICAL PLAN EXPERIENCE

FITTED DEVELOPMENT FACTORS

MEDICAL INCURRED LOSSES

	y = 1 / (a + b * x)	a = R ^ 2 =	(23.0227) 0.8444	b = 28.0398
Incurred Development	All Year Average	All Year Average - 1	Fitted Value	Fitted Value + 1
1				
1 1st to 2nd	1.1993	0.1993	0.1993	1.1993
2 2nd to 3rd	1.0301	0.0301	0.0303	1.0303
3 3rd to 4th	1.0040	0.0040	0.0164	1.0164
4 4th to 5th	1.0716	0.0716	0.0112	1.0112
5 5th to 6th	0.9846	(0.0154)	0.0085	1.0085
6 6th to 7th	0.9841	(0.0159)	0.0069	1.0069
7 7th to 8th	1.0097	0.0097	0.0058	1.0058
8 8th to 9th	0.9820	(0.0180)	0.0050	1.0050
9 9th to 10th	1.0047	0.0047	0.0044	1.0044
10 10th to 11th	1.0000		0.0039	1.0039
11 11th to 12th			0.0035	1.0035
12 12th to 13th			0.0032	1.0032
13 13th to 14th			0.0029	1.0029
14 14th to 15th			0.0027	1.0027
10th to Ultimate				1.0163

(a) 10th to 11th age-to-age factor set at 1.0000 to ensure proper tendency for the fitted curve.

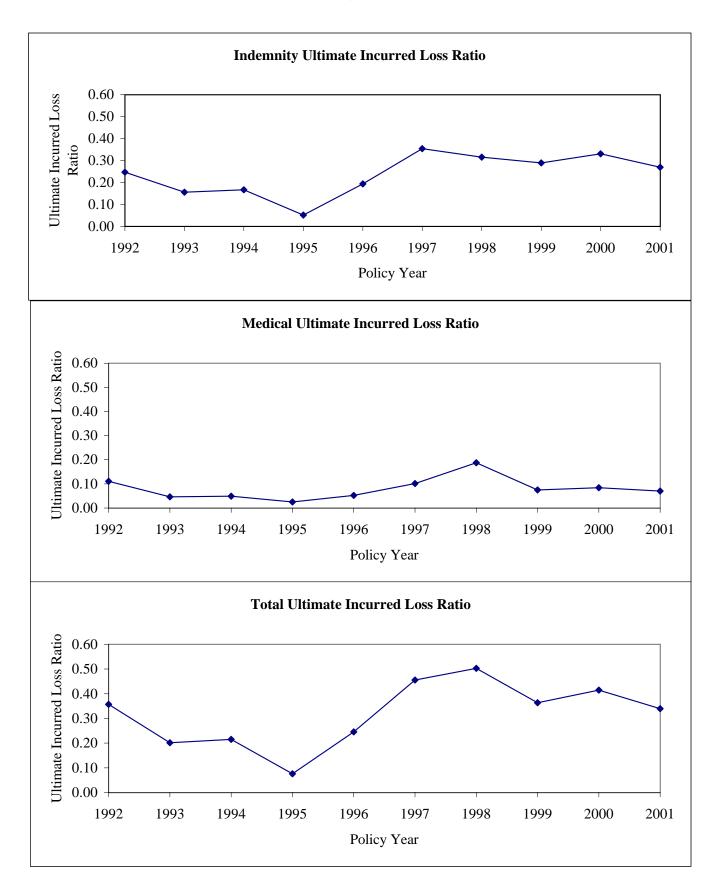
"F" CLASS UNIT STATISTICAL PLAN EXPERIENCE

ULTIMATE LOSS RATIOS

	Policy Year	Standard Earned Premium	Premium On-Level Factor	Adjusted Premium	Reported Incurred Loss	Loss Level	Loss Development Factor	Ultimate Incurred Loss	Loss Ratio
		(1)	(2)	(3)	(4)	(5)	(6)	(7)=(4)*(6)	(8)=(7)/(3)
Indemnity	/ 92	8,224,657	2.2129	18,200,343	4,461,621	10	1.0055	4,486,160	0.2465
maching	93	8,868,022	2.2129	19,624,046	3,030,631	9	1.0080	3,054,876	0.1557
	94	8,613,777	2.2129	19,061,427	3,134,219	8	1.0116	3,170,576	0.1663
	95	9,317,313	2.2129	20,618,282	1,033,800	7	1.0171	1,051,478	0.0510
	96	10,841,351	2.2129	23,990,826	4,517,523	6	1.0259	4,634,527	0.1932
	97	6,729,291	1.3202	8,884,010	3,022,175	5	1.0412	3,146,689	0.3542
	98	11,198,940	0.9939	11,130,626	3,281,895	4	1.0705	3,513,269	0.3156
	99	13,636,610	0.9939	13,553,427	3,443,905	3	1.1363	3,913,309	0.2887
	00	11,043,309	1.0007	11,051,039	2,752,276	2	1.3278	3,654,472	0.3307
	01	16,316,252	1.1052	18,032,722	2,156,519	1	2.2538	4,860,363	0.2695
	10 Year Total	104,789,522		164,146,748	30,834,564			35,485,719	0.2162
	5 Year Average								0.3117
Medical	J Teal Average								0.5117
mourou									
	92	8,224,657	2.2129	18,200,343	1,976,328	10	1.0163	2,008,542	0.1104
	93	8,868,022	2.2129	19,624,046	886,407	9	1.0208	904,844	0.0461
	94	8,613,777	2.2129	19,061,427	909,115	8	1.0259	932,661	0.0489
	95	9,317,313	2.2129	20,618,282	500,033	7	1.0319	515,984	0.0250
	96	10,841,351	2.2129	23,990,826	1,208,846	6	1.0390	1,255,991	0.0524
	97	6,729,291	1.3202	8,884,010	858,713	5	1.0478	899,759	0.1013
	98	11,198,940	0.9939	11,130,626	1,968,928	4	1.0595	2,086,079	0.1874
	99	13,636,610	0.9939	13,553,427	941,493	3	1.0769	1,013,894	0.0748
	00	11,043,309	1.0007	11,051,039	835,307	2	1.1095	926,773	0.0839
	01	16,316,252	1.1052	18,032,722	952,538	1	1.3306	1,267,447	0.0703
	10 Year Total	104,789,522		164,146,748	11,037,708			11,811,974	0.0720
	5 Year Average							l	0.1035
Total	92	8,224,657	2.2129	18,200,343	6,437,949			6,494,702	0.3568
	93	8,868,022	2.2129	19,624,046	3,917,038			3,959,720	0.2018
	94	8,613,777	2.2129	19,061,427	4,043,334			4,103,237	0.2153
	95	9,317,313	2.2129	20,618,282	1,533,833			1,567,462	0.0760
	96	10,841,351	2.2129	23,990,826	5,726,369			5,890,518	0.2455
	97	6,729,291	1.3202	8,884,010	3,880,888			4,046,448	0.4555
	98	11,198,940	0.9939	11,130,626	5,250,823			5,599,348	0.5031
	99	13,636,610	0.9939	13,553,427	4,385,398			4,927,203	0.3635
	00	11,043,309	1.0007	11,051,039	3,587,583			4,581,245	0.4146
	01	16,316,252	1.1052	18,032,722	3,109,057			6,127,810	0.3398
	10 Year Total	104,789,522		164,146,748	41,872,272			47,297,693	0.2881

5 Year Average

7



INDEMNITY		3 points	4 points	5 points	6 points	7 points	8 points	9 points	10 points
LINEAR	Average Loss Ratio	0.2963	0.3011	0.3117	0.2920	0.2576	0.2462	0.2361	0.2371
EXPONENTIAL	Trended Loss Ratio Trend Factor Annual. Trend Factor R^2 Trended Loss Ratio Trend Factor Annual. Trend Factor	0.2571 0.8677 0.9769 0.0941 0.2565 0.8657 0.9766	0.2570 0.8535 0.9779 0.2071 0.2571 0.8539 0.9779	0.2333 0.7485 0.9648 0.5300 0.2407 0.7722 0.9685	0.3373 1.1551 1.0160 0.0712 0.3567 1.2216 1.0223	0.4455 1.7294 1.0558 0.4050 0.8012 3.1102 1.1191	0.4318 1.7539 1.0520 0.4559 0.6374 2.5890 1.0896	0.4186 1.7730 1.0485 0.4947 0.5490 2.3253 1.0723	0.3750 1.5816 1.0357 0.3380 0.4201 1.7718 1.0447
MEDICAL	R^2	0.1092	0.2281	0.5324	0.1145	0.4403	0.3963	0.3797	0.2254
LINEAR	Average Loss Ratio	0.0763	0.1041	0.1035	0.0950	0.0850	0.0805	0.0767	0.0801
	Trended Loss Ratio Trend Factor Annual. Trend Factor R^2	0.0671 0.8794 0.9791 0.1055	(0.0527) (0.5062) #NUM! 0.6264		0.0830 0.8737 0.9852 0.0070	0.1225 1.4412 1.0369 0.0675	0.1273 1.5814 1.0422 0.1260	0.1282 1.6714 1.0434 0.1770	0.1062 1.3258 1.0218 0.0518
EXPONENTIAL	Trended Loss Ratio Trend Factor Annual. Trend Factor R^2	0.0671 0.8794 0.9791 0.1195	0.0261 0.2507 0.8226 0.6394	0.0442 0.4271 0.9001 0.3750	0.0870 0.9158 0.9904 -	0.1644 1.9341 1.0676 0.2195	0.1552 1.9280 1.0610 0.2603	0.1475 1.9231 1.0556 0.2982	0.1053 1.3146 1.0211 0.0869
TOTAL									
LINEAR	Average Loss Ratio	0.3726	0.4052	0.4152	0.3870	0.3426	0.3267	0.3128	0.3172
EXPONENTIAL	Trended Loss Ratio	0.3242	0.2043	0.2527	0.4203	0.5680	0.5591	0.5468	0.4812
	Trended Loss Ratio	0.3236	0.2832	0.2849	0.4437	0.9656	0.7926	0.6965	0.5254