

PENNSYLVANIA COMPENSATION RATING BUREAU

Empirical Pennsylvania Loss Distribution

Pages 1 through 4 of the attached exhibit present a distribution of Pennsylvania losses by size of claim. The losses used to produce this distribution include three years of experience. Losses have been trended to the midpoint of the experience period for the proposed loss costs and adjusted to reflect current benefit levels. Additionally, losses were brought to an ultimate level by applying development factors to open claims.

Page 5 of the exhibit shows a summary and includes loss ranges consistent with those published with the excess loss factors. In certain instances it was necessary to interpolate between loss size ranges in the empirical distribution in deriving excess loss factors for specified limits.

The PCR'B's analysis this year again considered loss distributions by type of injury based solely on Pennsylvania experience. Pages 6 through 9 of this exhibit show excess loss ratios by loss limitation separately for death, permanent total, permanent partial, temporary total and medical-only claims. The columns labeled "Actual" represent excess losses based entirely on actual losses. For each type of injury except medical-only, losses of \$500,000 and higher were fitted to a loss distribution curve and actual losses and claim counts were replaced by the fitted values. Cumulative losses and claim counts were then recalculated using fitted values above \$500,000 and actual values for loss limitations below \$500,000. The resulting excess loss ratios are shown in the column labeled "Fitted". Please Note: The term "Pareto" refers to "Single Parameter Pareto Distribution".

Page 10 is a graph showing the cumulative loss distribution for the above mentioned types of injury, along with the total for all injuries. The y-axis represents the cumulative percentage of total incurred losses.

PENNSYLVANIA  
DISTRIBUTION OF LOSSES

LIMITS	ACCUMULATED CLAIMS (ADDED UP)	NUMBER OF CLAIMS	ACCUMULATED LOSSES (ADDED DOWN)	INDEMNITY AND MEDICAL	EXCESS RATIO	AVERAGE
-	999	287,990	\$ 125,105,718	\$ 125,105,718	1.0000	\$ 434
1,000	1,999	74,510	\$ 229,906,158	\$ 104,800,440	.9842	\$ 1,407
2,000 -	2,999	31,008	\$ 305,910,697	\$ 76,004,539	.9275	\$ 2,451
3,000 -	3,999	18,547	\$ 370,124,213	\$ 64,213,516	.9080	\$ 3,462
4,000 -	4,999	12,560	\$ 426,331,923	\$ 56,207,710	.8915	\$ 4,475
5,000 -	5,999	9,487	\$ 478,290,822	\$ 51,958,899	.8769	\$ 5,477
6,000 -	6,999	7,853	\$ 529,175,631	\$ 50,884,809	.8637	\$ 6,480
7,000 -	7,999	6,229	\$ 575,806,738	\$ 46,631,107	.8516	\$ 7,486
8,000 -	8,999	5,396	\$ 621,578,142	\$ 45,771,404	.8403	\$ 8,482
9,000 -	9,999	4,578	\$ 665,000,894	\$ 43,422,752	.8298	\$ 9,485
10,000 -	10,999	4,022	\$ 707,177,103	\$ 42,176,209	.8200	\$ 10,486
11,000 -	11,999	3,449	\$ 746,806,483	\$ 39,629,380	.8106	\$ 11,490
12,000 -	12,999	3,136	\$ 785,949,978	\$ 39,143,495	.8018	\$ 12,482
13,000 -	13,999	2,804	\$ 823,775,494	\$ 37,825,516	.7933	\$ 13,490
14,000 -	14,999	2,463	\$ 859,469,745	\$ 35,694,251	.7853	\$ 14,492
15,000 -	15,999	2,196	\$ 893,478,801	\$ 34,009,056	.7775	\$ 15,487
16,000 -	16,999	1,971	\$ 925,985,835	\$ 32,507,034	.7701	\$ 16,493
17,000 -	17,999	1,829	\$ 958,005,057	\$ 32,019,222	.7629	\$ 17,506
18,000 -	18,999	1,802	\$ 991,325,049	\$ 33,319,992	.7560	\$ 18,491
19,000 -	19,999	1,513	\$ 1,020,822,083	\$ 29,497,034	.7493	\$ 19,496
20,000 -	20,999	1,448	\$ 1,050,472,644	\$ 29,650,561	.7428	\$ 20,477
21,000 -	21,999	1,381	\$ 1,080,158,905	\$ 29,686,261	.7365	\$ 21,496
22,000 -	22,999	1,308	\$ 1,109,589,910	\$ 29,431,005	.7303	\$ 22,501
23,000 -	23,999	1,256	\$ 1,139,103,066	\$ 29,513,156	.7244	\$ 23,498
24,000 -	24,999	1,117	\$ 1,166,455,378	\$ 27,352,312	.7186	\$ 24,487
25,000 -	25,999	1,051	\$ 1,193,231,946	\$ 26,776,568	.7129	\$ 25,477
26,000 -	26,999	991	\$ 1,219,496,049	\$ 26,264,103	.7074	\$ 26,503
27,000 -	27,999	985	\$ 1,246,588,714	\$ 27,092,665	.7020	\$ 27,505
28,000 -	28,999	883	\$ 1,271,742,151	\$ 25,153,437	.6968	\$ 28,486
29,000 -	29,999	902	\$ 1,298,362,611	\$ 26,620,460	.6916	\$ 29,513
30,000 -	30,999	841	\$ 1,324,000,408	\$ 25,637,797	.6866	\$ 30,485
31,000 -	31,999	773	\$ 1,348,343,488	\$ 24,343,080	.6817	\$ 31,492
32,000 -	32,999	731	\$ 1,372,110,234	\$ 23,766,746	.6769	\$ 32,513
33,000 -	33,999	702	\$ 1,395,630,875	\$ 23,520,641	.6722	\$ 33,505
34,000 -	34,999	684	\$ 1,419,230,684	\$ 23,599,809	.6675	\$ 34,503
35,000 -	35,999	635	\$ 1,441,785,506	\$ 22,554,822	.6630	\$ 35,519
36,000 -	36,999	608	\$ 1,463,962,165	\$ 22,176,659	.6585	\$ 36,475
37,000 -	37,999	559	\$ 1,484,929,934	\$ 20,967,769	.6542	\$ 37,509
38,000 -	38,999	588	\$ 1,507,563,090	\$ 22,633,156	.6499	\$ 38,492
39,000 -	39,999	540	\$ 1,528,891,232	\$ 21,328,142	.6456	\$ 39,497
40,000 -	40,999	525	\$ 1,550,150,886	\$ 21,259,654	.6415	\$ 40,495
41,000 -	41,999	504	\$ 1,571,056,466	\$ 20,905,580	.6374	\$ 41,479
42,000 -	42,999	496	\$ 1,592,132,164	\$ 21,075,698	.6333	\$ 42,491
43,000 -	43,999	517	\$ 1,614,616,127	\$ 22,483,963	.6294	\$ 43,489
44,000 -	44,999	456	\$ 1,634,915,229	\$ 20,299,102	.6255	\$ 44,516
45,000 -	45,999	409	\$ 1,653,518,188	\$ 18,602,959	.6216	\$ 45,484
46,000 -	46,999	432	\$ 1,673,616,787	\$ 20,098,599	.6179	\$ 46,525
47,000 -	47,999	399	\$ 1,692,565,184	\$ 18,948,397	.6141	\$ 47,490
48,000 -	48,999	434	\$ 1,713,613,984	\$ 21,048,800	.6104	\$ 48,500
49,000 -	49,999	386	\$ 1,732,727,602	\$ 19,113,618	.6068	\$ 49,517

PENNSYLVANIA  
DISTRIBUTION OF LOSSES

LIMITS	ACCUMULATED CLAIMS (ADDED UP)	NUMBER OF CLAIMS	ACCUMULATED LOSSES (ADDED DOWN)	INDEMNITY AND MEDICAL	EXCESS RATIO	AVERAGE
50,000 -	50,999	345	\$ 1,750,151,068	\$ 17,423,466	.6032	\$ 50,503
51,000 -	51,999	351	\$ 1,768,222,363	\$ 18,071,295	.5997	\$ 51,485
52,000 -	52,999	336	\$ 1,785,854,147	\$ 17,631,784	.5962	\$ 52,476
53,000 -	53,999	320	\$ 1,802,968,289	\$ 17,114,142	.5928	\$ 53,482
54,000 -	54,999	350	\$ 1,822,036,057	\$ 19,067,768	.5894	\$ 54,479
55,000 -	55,999	314	\$ 1,839,460,154	\$ 17,424,097	.5860	\$ 55,491
56,000 -	56,999	291	\$ 1,855,899,113	\$ 16,438,959	.5827	\$ 56,491
57,000 -	57,999	296	\$ 1,872,921,135	\$ 17,022,022	.5794	\$ 57,507
58,000 -	58,999	308	\$ 1,890,938,836	\$ 18,017,701	.5762	\$ 58,499
59,000 -	59,999	302	\$ 1,908,906,790	\$ 17,967,954	.5730	\$ 59,497
60,000 -	60,999	268	\$ 1,925,120,766	\$ 16,213,976	.5698	\$ 60,500
61,000 -	61,999	273	\$ 1,941,913,546	\$ 16,792,780	.5667	\$ 61,512
62,000 -	62,999	256	\$ 1,957,913,527	\$ 15,999,981	.5636	\$ 62,500
63,000 -	63,999	241	\$ 1,973,220,990	\$ 15,307,463	.5606	\$ 63,516
64,000 -	64,999	263	\$ 1,990,181,324	\$ 16,960,334	.5575	\$ 64,488
65,000 -	65,999	235	\$ 2,005,571,742	\$ 15,390,418	.5545	\$ 65,491
66,000 -	66,999	201	\$ 2,018,935,370	\$ 13,363,628	.5516	\$ 66,486
67,000 -	67,999	239	\$ 2,035,074,595	\$ 16,139,225	.5486	\$ 67,528
68,000 -	68,999	216	\$ 2,049,868,324	\$ 14,793,729	.5457	\$ 68,489
69,000 -	69,999	244	\$ 2,066,826,116	\$ 16,957,792	.5428	\$ 69,499
70,000 -	70,999	217	\$ 2,082,120,113	\$ 15,293,997	.5400	\$ 70,479
71,000 -	71,999	200	\$ 2,096,414,908	\$ 14,294,795	.5372	\$ 71,474
72,000 -	72,999	219	\$ 2,112,298,511	\$ 15,883,603	.5344	\$ 72,528
73,000 -	73,999	190	\$ 2,126,260,038	\$ 13,961,527	.5316	\$ 73,482
74,000 -	74,999	180	\$ 2,139,669,886	\$ 13,409,848	.5289	\$ 74,499
75,000 -	75,999	208	\$ 2,155,376,168	\$ 15,706,282	.5261	\$ 75,511
76,000 -	76,999	203	\$ 2,170,911,344	\$ 15,535,176	.5235	\$ 76,528
77,000 -	77,999	179	\$ 2,184,788,119	\$ 13,876,775	.5208	\$ 77,524
78,000 -	78,999	193	\$ 2,199,936,395	\$ 15,148,276	.5181	\$ 78,488
79,000 -	79,999	168	\$ 2,213,297,731	\$ 13,361,336	.5155	\$ 79,532
80,000 -	80,999	171	\$ 2,227,061,230	\$ 13,763,499	.5129	\$ 80,488
81,000 -	81,999	163	\$ 2,240,347,015	\$ 13,285,785	.5103	\$ 81,508
82,000 -	82,999	181	\$ 2,255,273,872	\$ 14,926,857	.5078	\$ 82,469
83,000 -	83,999	162	\$ 2,268,803,865	\$ 13,529,993	.5053	\$ 83,518
84,000 -	84,999	159	\$ 2,282,239,835	\$ 13,435,970	.5027	\$ 84,503
85,000 -	85,999	137	\$ 2,293,954,034	\$ 11,714,199	.5002	\$ 85,505
86,000 -	86,999	160	\$ 2,307,793,908	\$ 13,839,874	.4978	\$ 86,499
87,000 -	87,999	143	\$ 2,320,304,262	\$ 12,510,354	.4953	\$ 87,485
88,000 -	88,999	138	\$ 2,332,519,008	\$ 12,214,746	.4929	\$ 88,513
89,000 -	89,999	146	\$ 2,345,591,492	\$ 13,072,484	.4905	\$ 89,538
90,000 -	90,999	148	\$ 2,358,985,348	\$ 13,393,856	.4881	\$ 90,499
91,000 -	91,999	149	\$ 2,372,625,207	\$ 13,639,859	.4857	\$ 91,543
92,000 -	92,999	140	\$ 2,385,575,510	\$ 12,950,303	.4833	\$ 92,502
93,000 -	93,999	155	\$ 2,400,068,499	\$ 14,492,989	.4810	\$ 93,503
94,000 -	94,999	128	\$ 2,412,168,628	\$ 12,100,129	.4787	\$ 94,532
95,000 -	95,999	170	\$ 2,428,404,165	\$ 16,235,537	.4763	\$ 95,503
96,000 -	96,999	132	\$ 2,441,134,961	\$ 12,730,796	.4741	\$ 96,445
97,000 -	97,999	134	\$ 2,454,200,133	\$ 13,065,172	.4718	\$ 97,501
98,000 -	98,999	142	\$ 2,468,180,790	\$ 13,980,657	.4695	\$ 98,455
99,000 -	99,999	143	\$ 2,482,405,650	\$ 14,224,860	.4673	\$ 99,475
100,000 -	109,999	1,222	\$ 2,610,367,220	\$ 127,961,570	.4651	\$ 104,715

PENNSYLVANIA  
DISTRIBUTION OF LOSSES

LIMITS	ACCUMULATED CLAIMS (ADDED UP)	NUMBER OF CLAIMS	ACCUMULATED LOSSES (ADDED DOWN)	INDEMNITY AND MEDICAL	EXCESS RATIO	AVERAGE
110,000 -	119,999	1,158	\$ 2,743,503,684	\$ 133,136,464	.4438	\$ 114,971
120,000 -	129,999	1,048	\$ 2,874,400,083	\$ 130,896,399	.4240	\$ 124,901
130,000 -	139,999	976	\$ 3,006,154,492	\$ 131,754,409	.4056	\$ 134,994
140,000 -	149,999	905	\$ 3,137,297,870	\$ 131,143,378	.3885	\$ 144,910
150,000 -	159,999	917	\$ 3,279,247,450	\$ 141,949,580	.3726	\$ 154,798
160,000 -	169,999	833	\$ 3,416,635,238	\$ 137,387,788	.3578	\$ 164,931
170,000 -	179,999	691	\$ 3,537,505,800	\$ 120,870,562	.3441	\$ 174,921
180,000 -	189,999	668	\$ 3,661,061,102	\$ 123,555,302	.3314	\$ 184,963
190,000 -	199,999	576	\$ 3,773,507,659	\$ 112,446,557	.3196	\$ 195,220
200,000 -	209,999	498	\$ 3,875,511,261	\$ 102,003,602	.3085	\$ 204,827
210,000 -	219,999	470	\$ 3,976,484,509	\$ 100,973,248	.2981	\$ 214,837
220,000 -	229,999	452	\$ 4,078,116,417	\$ 101,631,908	.2884	\$ 224,849
230,000 -	239,999	406	\$ 4,173,489,135	\$ 95,372,718	.2792	\$ 234,908
240,000 -	249,999	356	\$ 4,260,752,757	\$ 87,263,622	.2705	\$ 245,123
250,000 -	259,999	350	\$ 4,350,106,392	\$ 89,353,635	.2624	\$ 255,296
260,000 -	269,999	305	\$ 4,430,885,276	\$ 80,778,884	.2546	\$ 264,849
270,000 -	279,999	311	\$ 4,516,363,292	\$ 85,478,016	.2473	\$ 274,849
280,000 -	289,999	297	\$ 4,601,092,056	\$ 84,728,764	.2404	\$ 285,282
290,000 -	299,999	264	\$ 4,678,918,318	\$ 77,826,262	.2339	\$ 294,796
300,000 -	314,999	359	\$ 4,789,366,649	\$ 110,448,331	.2277	\$ 307,656
315,000 -	329,999	317	\$ 4,891,595,040	\$ 102,228,391	.2191	\$ 322,487
330,000 -	344,999	285	\$ 4,987,816,078	\$ 96,221,038	.2110	\$ 337,618
345,000 -	359,999	254	\$ 5,077,410,015	\$ 89,593,937	.2036	\$ 352,732
360,000 -	374,999	259	\$ 5,172,660,167	\$ 95,250,152	.1966	\$ 367,761
375,000 -	389,999	197	\$ 5,247,897,149	\$ 75,236,982	.1901	\$ 381,914
390,000 -	404,999	187	\$ 5,322,118,233	\$ 74,221,084	.1841	\$ 396,904
405,000 -	419,999	187	\$ 5,399,214,256	\$ 77,096,023	.1785	\$ 412,278
420,000 -	439,999	182	\$ 5,477,606,406	\$ 78,392,150	.1732	\$ 430,726
440,000 -	459,999	200	\$ 5,567,559,708	\$ 89,953,302	.1666	\$ 449,767
460,000 -	479,999	155	\$ 5,640,467,689	\$ 72,907,981	.1604	\$ 470,374
480,000 -	499,999	152	\$ 5,714,799,846	\$ 74,332,157	.1547	\$ 489,027
500,000 -	519,999	129	\$ 5,780,587,921	\$ 65,788,075	.1495	\$ 509,985
520,000 -	539,999	105	\$ 5,836,172,134	\$ 55,584,213	.1445	\$ 529,373
540,000 -	559,999	100	\$ 5,891,145,360	\$ 54,973,226	.1399	\$ 549,732
560,000 -	579,999	92	\$ 5,943,559,885	\$ 52,414,525	.1355	\$ 569,723
580,000 -	599,999	76	\$ 5,988,345,465	\$ 44,785,580	.1314	\$ 589,284
600,000 -	629,999	127	\$ 6,066,353,029	\$ 78,007,564	.1275	\$ 614,233
630,000 -	659,999	112	\$ 6,138,625,536	\$ 72,272,507	.1220	\$ 645,290
660,000 -	699,999	123	\$ 6,222,353,395	\$ 83,727,859	.1170	\$ 680,714
700,000 -	749,999	138	\$ 6,322,423,871	\$ 100,070,476	.1108	\$ 725,148
750,000 -	799,999	119	\$ 6,414,563,203	\$ 92,139,332	.1040	\$ 774,280
800,000 -	849,999	97	\$ 6,494,672,274	\$ 80,109,071	.0980	\$ 825,867
850,000 -	899,999	93	\$ 6,576,109,965	\$ 81,437,691	.0926	\$ 875,674
900,000 -	999,999	136	\$ 6,704,782,741	\$ 128,672,776	.0879	\$ 946,123
1,000,000 -	1,099,999	100	\$ 6,809,857,385	\$ 105,074,644	.0799	\$ 1,050,746
1,100,000 -	1,199,999	61	\$ 6,879,865,517	\$ 70,008,132	.0733	\$ 1,147,674
1,200,000 -	1,299,999	56	\$ 6,949,565,075	\$ 69,699,558	.0678	\$ 1,244,635
1,300,000 -	1,399,999	48	\$ 7,014,154,955	\$ 64,589,880	.0631	\$ 1,345,623
1,400,000 -	1,499,999	41	\$ 7,073,397,434	\$ 59,242,479	.0590	\$ 1,444,939
1,500,000 -	1,599,999	29	\$ 7,118,442,619	\$ 45,045,185	.0554	\$ 1,553,282
1,600,000 -	1,699,999	30	\$ 7,168,134,802	\$ 49,692,183	.0523	\$ 1,656,406

PENNSYLVANIA  
DISTRIBUTION OF LOSSES

LIMITS	ACCUMULATED CLAIMS (ADDED UP)	NUMBER OF CLAIMS	ACCUMULATED LOSSES (ADDED DOWN)	INDEMNITY AND MEDICAL	EXCESS RATIO	AVERAGE
1,700,000 -	1,799,999	202	\$ 7,203,333,701	\$ 35,198,899	.0495	\$ 1,759,945
1,800,000 -	1,899,999	182	\$ 7,221,723,378	\$ 18,389,677	.0471	\$ 1,838,968
1,900,000 -	1,999,999	172	\$ 7,254,590,077	\$ 32,866,699	.0449	\$ 1,933,335
2,000,000 -	2,999,999	155	\$ 7,444,547,683	\$ 189,957,606	.0428	\$ 2,374,470
3,000,000 -	3,999,999	75	\$ 7,533,428,874	\$ 88,881,191	.0296	\$ 3,291,896
4,000,000 -	4,999,999	48	\$ 7,603,711,110	\$ 70,282,236	.0225	\$ 4,392,640
5,000,000 -	5,999,999	32	\$ 7,647,575,255	\$ 43,864,145	.0176	\$ 5,483,018
6,000,000 -	6,999,999	24	\$ 7,698,893,429	\$ 51,318,174	.0141	\$ 6,414,772
7,000,000 -	7,999,999	16	\$ 7,698,893,429	\$ -	.0117	#DIV/0!
8,000,000 -	8,999,999	16	\$ 7,707,743,250	\$ 8,849,821	.0096	\$ 8,849,821
9,000,000 -	9,999,999	15	\$ 7,737,074,132	\$ 29,330,882	.0076	\$ 9,776,961
10,000,000 - AND GREATER		12	\$ 7,903,111,392	\$ 166,037,260	.0058	\$ 13,836,438
GRAND TOTALS		533,942	EXCLUDING CONTRACT MEDICAL	\$ 7,903,111,392		\$ 14,801

**Pennsylvania Compensation Rating Bureau  
Distribution of Losses**

<u>Excess Loss Limits *</u>		Loss Amount	Number of Claims	Excess Loss Amount	Average	Empirical Excess Ratio
From	TO (<)					
				7,903,111,392		
0	10,000	665,000,894	458,158	6,480,270,498	1,451	.8200
10,000	15,000	194,468,851	15,874	6,144,991,647	12,251	.7775
15,000	20,000	161,352,338	9,311	5,870,309,309	17,329	.7428
20,000	25,000	145,633,295	6,510	5,634,431,014	22,371	.7129
25,000	30,000	131,907,233	4,812	5,426,438,781	27,412	.6866
30,000	35,000	120,868,073	3,731	5,239,770,708	32,396	.6630
35,000	40,000	109,660,548	2,930	5,069,580,160	37,427	.6415
40,000	50,000	203,836,370	4,558	4,767,483,790	44,721	.6032
50,000	75,000	406,942,284	6,655	4,158,216,506	61,148	.5261
75,000	100,000	342,735,764	3,952	3,675,605,742	86,725	.4651
100,000	125,000	326,546,234	2,904	3,275,784,508	112,447	.4145
125,000	150,000	328,345,987	2,405	2,944,513,522	136,526	.3726
150,000	175,000	339,772,649	2,096	2,667,903,373	162,144	.3376
175,000	200,000	296,437,140	1,590	2,438,203,733	186,497	.3085
200,000	225,000	253,792,804	1,194	2,241,635,929	212,557	.2836
225,000	250,000	233,452,294	988	2,073,608,635	236,288	.2624
250,000	275,000	212,871,527	811	1,926,749,608	262,642	.2438
275,000	300,000	205,294,034	717	1,799,793,074	286,523	.2277
300,000	325,000	178,600,592	570	1,687,850,816	313,151	.2136
325,000	350,000	160,161,814	475	1,589,614,002	336,946	.2011
350,000	375,000	154,979,443	428	1,502,701,225	361,820	.1901
375,000	400,000	124,717,705	322	1,424,800,187	387,723	.1803
400,000	425,000	121,434,422	295	1,354,861,598	411,875	.1714
425,000	450,000	103,770,764	237	1,291,078,335	438,777	.1634
450,000	475,000	99,657,637	216	1,233,614,448	460,845	.1561
475,000	500,000	92,559,152	191	1,181,311,546	485,238	.1495
500,000	600,000	273,545,619	502	1,007,565,927	544,912	.1275
600,000	700,000	234,007,930	362	875,757,997	646,431	.1108
700,000	800,000	192,209,808	257	774,148,189	747,898	.0980
800,000	900,000	161,546,762	190	694,301,427	850,246	.0879
900,000	1,000,000	128,672,776	136	631,328,651	946,123	.0799
1,000,000	2,000,000	549,807,336	412	338,521,315	1,334,484	.0428
2,000,000	3,000,000	189,957,606	80	233,563,709	2,374,470	.0296
3,000,000	4,000,000	88,881,191	27	177,682,518	3,291,896	.0225
4,000,000	5,000,000	70,282,236	16	139,400,282	4,392,640	.0176
5,000,000	6,000,000	43,864,145	8	111,536,137	5,483,018	.0141
6,000,000	7,000,000	51,318,174	8	92,217,963	6,414,772	.0117
7,000,000	8,000,000	0	0	76,217,963	0	.0096
8,000,000	9,000,000	8,849,821	1	60,368,142	8,849,821	.0076
9,000,000	10,000,000	29,330,882	3	46,037,260	9,776,961	.0058
10,000,000	& Over	166,037,260	12		13,836,438	
TOTAL/AVERAGE		7,903,111,392	533,942		14,801	

\* Limits consistent with published loss limits for excess loss factors  
Values have been interpolated when not available on prior pages

**PENNSYLVANIA  
DISTRIBUTION OF LOSSES**

Loss Limit	Death-Pareto		PT-Lognormal		PP-Pareto		TT-Pareto		Med only
	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio
1,000	.9975	.9978	.9996	.9996	.9943	.9944	.9578	.9578	.5964
2,000	.9950	.9956	.9992	.9993	.9886	.9888	.9179	.9180	.4458
3,000	.9925	.9934	.9988	.9989	.9829	.9832	.8808	.8808	.3596
4,000	.9902	.9913	.9985	.9986	.9773	.9777	.8464	.8465	.3017
5,000	.9880	.9894	.9981	.9982	.9718	.9723	.8146	.8147	.2595
6,000	.9859	.9874	.9977	.9979	.9663	.9669	.7850	.7851	.2272
7,000	.9837	.9855	.9974	.9975	.9608	.9616	.7575	.7576	.2018
8,000	.9816	.9836	.9970	.9972	.9555	.9563	.7318	.7319	.1813
9,000	.9794	.9817	.9966	.9968	.9502	.9511	.7078	.7080	.1644
10,000	.9773	.9798	.9963	.9965	.9449	.9459	.6854	.6856	.1502
11,000	.9752	.9779	.9959	.9961	.9397	.9408	.6643	.6645	.1382
12,000	.9730	.9760	.9955	.9958	.9346	.9358	.6445	.6447	.1280
13,000	.9709	.9741	.9951	.9954	.9295	.9308	.6258	.6260	.1190
14,000	.9688	.9722	.9948	.9951	.9245	.9258	.6082	.6084	.1112
15,000	.9667	.9704	.9944	.9947	.9195	.9210	.5915	.5917	.1043
16,000	.9646	.9685	.9940	.9944	.9146	.9161	.5757	.5759	.0982
17,000	.9625	.9666	.9937	.9941	.9097	.9113	.5606	.5609	.0926
18,000	.9604	.9647	.9933	.9937	.9049	.9066	.5462	.5465	.0876
19,000	.9583	.9629	.9929	.9934	.9001	.9019	.5325	.5328	.0831
20,000	.9562	.9610	.9926	.9930	.8954	.8973	.5194	.5197	.0790
21,000	.9541	.9592	.9922	.9927	.8907	.8927	.5069	.5072	.0751
22,000	.9520	.9573	.9918	.9923	.8861	.8881	.4949	.4952	.0716
23,000	.9500	.9555	.9915	.9920	.8815	.8836	.4834	.4837	.0684
24,000	.9479	.9536	.9911	.9917	.8769	.8792	.4724	.4727	.0654
25,000	.9458	.9518	.9907	.9913	.8724	.8748	.4618	.4622	.0626
26,000	.9438	.9500	.9904	.9910	.8680	.8704	.4517	.4520	.0600
27,000	.9417	.9481	.9900	.9906	.8635	.8660	.4419	.4422	.0576
28,000	.9397	.9463	.9897	.9903	.8592	.8617	.4325	.4328	.0553
29,000	.9376	.9445	.9893	.9900	.8548	.8575	.4234	.4238	.0532
30,000	.9356	.9426	.9890	.9896	.8505	.8532	.4147	.4150	.0512
31,000	.9335	.9408	.9886	.9893	.8462	.8490	.4063	.4067	.0494
32,000	.9315	.9390	.9883	.9890	.8420	.8449	.3982	.3986	.0476
33,000	.9294	.9372	.9879	.9886	.8378	.8408	.3904	.3907	.0459
34,000	.9274	.9354	.9876	.9883	.8336	.8367	.3828	.3832	.0444
35,000	.9253	.9335	.9872	.9880	.8295	.8326	.3754	.3758	.0429
36,000	.9233	.9317	.9869	.9877	.8254	.8286	.3683	.3687	.0415
37,000	.9213	.9299	.9865	.9873	.8213	.8246	.3615	.3619	.0402
38,000	.9193	.9281	.9862	.9870	.8173	.8206	.3548	.3552	.0389
39,000	.9172	.9263	.9858	.9867	.8133	.8167	.3483	.3487	.0377
40,000	.9152	.9246	.9855	.9864	.8093	.8128	.3420	.3424	.0365
41,000	.9132	.9228	.9851	.9860	.8054	.8090	.3359	.3363	.0354
42,000	.9112	.9210	.9848	.9857	.8015	.8051	.3300	.3304	.0344
43,000	.9092	.9192	.9845	.9854	.7976	.8013	.3242	.3247	.0334
44,000	.9072	.9174	.9841	.9851	.7938	.7976	.3186	.3191	.0324
45,000	.9052	.9156	.9838	.9848	.7900	.7938	.3132	.3136	.0315
46,000	.9032	.9139	.9834	.9844	.7862	.7901	.3079	.3083	.0306
47,000	.9012	.9121	.9831	.9841	.7824	.7864	.3028	.3032	.0298
48,000	.8992	.9103	.9827	.9838	.7787	.7828	.2978	.2982	.0290
49,000	.8972	.9085	.9824	.9835	.7750	.7791	.2929	.2933	.0282

**PENNSYLVANIA  
DISTRIBUTION OF LOSSES**

Loss Limit	Death-Pareto		PT-Lognormal		PP-Pareto		TT-Pareto		Med only
	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio
50,000	.8953	.9068	.9821	.9831	.7714	.7755	.2881	.2885	.0275
51,000	.8933	.9050	.9817	.9828	.7677	.7720	.2834	.2839	.0267
52,000	.8913	.9032	.9814	.9825	.7641	.7684	.2789	.2793	.0260
53,000	.8893	.9015	.9811	.9822	.7605	.7649	.2745	.2749	.0254
54,000	.8873	.8997	.9807	.9819	.7570	.7614	.2701	.2706	.0247
55,000	.8853	.8980	.9804	.9816	.7534	.7579	.2659	.2664	.0241
56,000	.8834	.8962	.9800	.9813	.7499	.7545	.2618	.2622	.0235
57,000	.8814	.8944	.9797	.9809	.7464	.7511	.2577	.2582	.0229
58,000	.8794	.8927	.9794	.9806	.7429	.7477	.2538	.2542	.0224
59,000	.8775	.8910	.9790	.9803	.7395	.7443	.2499	.2504	.0219
60,000	.8756	.8892	.9787	.9800	.7361	.7409	.2461	.2466	.0214
61,000	.8736	.8875	.9784	.9797	.7327	.7376	.2424	.2429	.0209
62,000	.8717	.8858	.9780	.9794	.7293	.7343	.2388	.2393	.0204
63,000	.8698	.8841	.9777	.9791	.7260	.7310	.2353	.2357	.0200
64,000	.8679	.8824	.9774	.9788	.7227	.7277	.2318	.2322	.0195
65,000	.8659	.8807	.9770	.9784	.7194	.7245	.2284	.2288	.0191
66,000	.8640	.8790	.9767	.9781	.7161	.7213	.2250	.2255	.0187
67,000	.8621	.8773	.9764	.9778	.7128	.7181	.2218	.2222	.0183
68,000	.8602	.8755	.9760	.9775	.7096	.7149	.2185	.2190	.0179
69,000	.8582	.8738	.9757	.9772	.7063	.7117	.2154	.2158	.0176
70,000	.8563	.8721	.9754	.9769	.7031	.7086	.2123	.2127	.0172
71,000	.8544	.8704	.9750	.9766	.7000	.7055	.2092	.2097	.0169
72,000	.8525	.8687	.9747	.9762	.6968	.7024	.2062	.2067	.0166
73,000	.8506	.8670	.9744	.9759	.6937	.6993	.2033	.2038	.0162
74,000	.8487	.8654	.9740	.9756	.6905	.6962	.2004	.2009	.0159
75,000	.8468	.8637	.9737	.9753	.6874	.6932	.1976	.1981	.0156
76,000	.8450	.8620	.9734	.9750	.6844	.6901	.1948	.1953	.0153
77,000	.8431	.8603	.9731	.9747	.6813	.6871	.1921	.1926	.0150
78,000	.8412	.8587	.9728	.9744	.6782	.6841	.1895	.1900	.0148
79,000	.8393	.8570	.9724	.9741	.6752	.6811	.1869	.1874	.0145
80,000	.8374	.8553	.9721	.9738	.6722	.6782	.1843	.1848	.0142
81,000	.8356	.8536	.9718	.9735	.6692	.6752	.1818	.1823	.0140
82,000	.8337	.8520	.9715	.9732	.6662	.6723	.1793	.1798	.0137
83,000	.8318	.8503	.9711	.9729	.6632	.6694	.1768	.1773	.0135
84,000	.8300	.8487	.9708	.9726	.6603	.6665	.1744	.1749	.0132
85,000	.8281	.8470	.9705	.9723	.6574	.6636	.1721	.1726	.0130
86,000	.8262	.8453	.9702	.9720	.6544	.6608	.1698	.1703	.0128
87,000	.8244	.8437	.9698	.9717	.6515	.6579	.1675	.1680	.0126
88,000	.8225	.8421	.9695	.9714	.6487	.6551	.1652	.1657	.0123
89,000	.8207	.8404	.9692	.9711	.6458	.6523	.1630	.1635	.0121
90,000	.8189	.8388	.9689	.9708	.6429	.6495	.1608	.1613	.0119
91,000	.8170	.8371	.9685	.9705	.6401	.6467	.1587	.1592	.0117
92,000	.8152	.8355	.9682	.9701	.6373	.6439	.1566	.1571	.0115
93,000	.8133	.8339	.9679	.9698	.6345	.6411	.1545	.1550	.0113
94,000	.8115	.8322	.9676	.9695	.6317	.6384	.1524	.1529	.0112
95,000	.8096	.8306	.9672	.9692	.6289	.6357	.1504	.1509	.0110
96,000	.8078	.8289	.9669	.9689	.6261	.6330	.1484	.1489	.0108
97,000	.8060	.8273	.9666	.9686	.6234	.6303	.1464	.1470	.0106
98,000	.8041	.8257	.9663	.9683	.6207	.6276	.1445	.1450	.0105
99,000	.8023	.8240	.9659	.9680	.6180	.6249	.1426	.1432	.0103
100,000	.8005	.8224	.9656	.9677	.6153	.6223	.1408	.1413	.0101



**PENNSYLVANIA  
DISTRIBUTION OF LOSSES**

Loss Limit	Death-Pareto		PT-Lognormal		PP-Pareto		TT-Pareto		Med only
	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio
110,000	.7825	.8064	.9624	.9647	.5891	.5966	.1238	.1243	.0087
120,000	.7650	.7908	.9592	.9617	.5643	.5723	.1092	.1097	.0075
130,000	.7480	.7757	.9561	.9587	.5409	.5492	.0967	.0973	.0066
140,000	.7314	.7609	.9529	.9558	.5187	.5275	.0861	.0867	.0058
150,000	.7148	.7462	.9498	.9528	.4978	.5070	.0770	.0776	.0052
160,000	.6988	.7319	.9467	.9500	.4782	.4877	.0693	.0698	.0046
170,000	.6833	.7181	.9437	.9472	.4599	.4698	.0626	.0631	.0042
180,000	.6682	.7047	.9408	.9444	.4428	.4529	.0567	.0573	.0038
190,000	.6535	.6916	.9379	.9416	.4267	.4372	.0515	.0521	.0034
200,000	.6393	.6790	.9349	.9389	.4116	.4224	.0469	.0475	.0032
210,000	.6253	.6665	.9322	.9363	.3974	.4084	.0428	.0434	.0030
220,000	.6117	.6544	.9294	.9337	.3840	.3952	.0392	.0397	.0028
230,000	.5981	.6423	.9267	.9312	.3713	.3828	.0359	.0365	.0026
240,000	.5848	.6304	.9240	.9286	.3593	.3710	.0330	.0336	.0025
250,000	.5716	.6187	.9214	.9262	.3480	.3599	.0304	.0310	.0024
260,000	.5587	.6072	.9189	.9238	.3372	.3493	.0280	.0286	.0023
270,000	.5460	.5959	.9164	.9215	.3270	.3393	.0260	.0265	.0021
280,000	.5336	.5849	.9140	.9192	.3173	.3298	.0240	.0246	.0020
290,000	.5216	.5742	.9116	.9169	.3082	.3208	.0223	.0229	.0019
300,000	.5100	.5638	.9092	.9147	.2995	.3123	.0207	.0213	.0018
315,000	.4931	.5488	.9058	.9115	.2873	.3003	.0186	.0192	.0016
330,000	.4768	.5343	.9024	.9084	.2760	.2892	.0168	.0173	.0014
345,000	.4617	.5209	.8991	.9052	.2655	.2789	.0151	.0157	.0013
360,000	.4475	.5082	.8957	.9020	.2556	.2692	.0137	.0143	.0011
375,000	.4334	.4957	.8924	.8989	.2465	.2602	.0124	.0130	.0010
390,000	.4198	.4835	.8891	.8959	.2380	.2519	.0113	.0119	.0009
405,000	.4063	.4716	.8858	.8928	.2300	.2440	.0103	.0109	.0008
420,000	.3934	.4601	.8825	.8897	.2225	.2366	.0095	.0101	.0008
440,000	.3768	.4453	.8782	.8856	.2130	.2274	.0086	.0091	.0007
460,000	.3610	.4312	.8739	.8816	.2044	.2188	.0077	.0082	.0006
480,000	.3460	.4179	.8698	.8777	.1963	.2109	.0069	.0074	.0005
500,000	.3317	.4051	.8656	.8738	.1889	.2036	.0062	.0067	.0004
520,000	.3179	.3930	.8615	.8699	.1819	.1968	.0056	.0062	.0003
540,000	.3044	.3817	.8574	.8661	.1753	.1904	.0051	.0056	.0002
560,000	.2913	.3711	.8534	.8623	.1691	.1845	.0046	.0052	.0002
580,000	.2786	.3612	.8494	.8586	.1633	.1789	.0042	.0048	.0001
600,000	.2663	.3519	.8455	.8548	.1578	.1737	.0039	.0044	.0001
630,000	.2487	.3388	.8398	.8492	.1500	.1665	.0034	.0040	.0000
660,000	.2328	.3269	.8342	.8436	.1429	.1599	.0030	.0036	.0000
700,000	.2124	.3124	.8270	.8363	.1342	.1520	.0026	.0031	.0000
750,000	.1887	.2962	.8183	.8272	.1246	.1432	.0022	.0026	.0000
800,000	.1678	.2818	.8099	.8182	.1161	.1354	.0018	.0023	.0000
850,000	.1487	.2689	.8019	.8093	.1086	.1285	.0015	.0020	.0000
900,000	.1313	.2573	.7943	.8006	.1020	.1223	.0012	.0017	.0000
1,000,000	.1032	.2372	.7793	.7836	.0910	.1117	.0008	.0014	.0000
1,100,000	.0825	.2204	.7648	.7670	.0819	.1029	.0005	.0011	.0000
1,200,000	.0667	.2062	.7509	.7510	.0743	.0955	.0003	.0009	.0000
1,300,000	.0552	.1939	.7369	.7354	.0678	.0892	.0002	.0008	.0000
1,400,000	.0462	.1831	.7239	.7204	.0622	.0837	.0001	.0006	.0000
1,500,000	.0394	.1737	.7110	.7058	.0573	.0789	.0000	.0005	.0000
1,600,000	.0343	.1653	.6986	.6916	.0531	.0747	.0000	.0005	.0000

**PENNSYLVANIA  
DISTRIBUTION OF LOSSES**

Loss Limit	Death-Pareto		PT-Lognormal		PP-Pareto		TT-Pareto		Med only
	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio
1,700,000	.0305	.1578	.6866	.6779	.0493	.0709	.0000	.0004	.0000
1,800,000	.0274	.1510	.6756	.6647	.0460	.0676	.0000	.0004	.0000
1,900,000	.0247	.1449	.6647	.6518	.0430	.0646	.0000	.0003	.0000
2,000,000	.0220	.1393	.6542	.6394	.0404	.0618	.0000	.0003	.0000
3,000,000	.0019	.1022	.5599	.5361	.0238	.0440	.0000	.0001	.0000
4,000,000	.0000	.0821	.4832	.4587	.0159	.0348	.0000	.0001	.0000
5,000,000	.0000	.0693	.4125	.3996	.0112	.0290	.0000	.0000	.0000
6,000,000	.0000	.0604	.3478	.3536	.0082	.0251	.0000	.0000	.0000
7,000,000	.0000	.0538	.2974	.3171	.0064	.0223	.0000	.0000	.0000
8,000,000	.0000	.0487	.2525	.2877	.0050	.0201	.0000	.0000	.0000
9,000,000	.0000	.0446	.2083	.2637	.0037	.0184	.0000	.0000	.0000
10,000,000	.0000	.0413	.1684	.2439	.0024	.0170	.0000	.0000	.0000

## Pennsylvania Compensation Rating Bureau Cumulative Distribution of Loss By Type of Injury ( 2009-2011)

