

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 Bureau's analysis this year also 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 and temporary total claims. The columns labeled "Actual" represent excess losses based entirely on actual losses. For each type of injury, 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
MEDICAL ONLY	803,178	654,304	\$ 598,710,195	\$ 598,710,195	.0000	\$ 915
-	1,999	148,874	\$ 621,061,459	\$ 22,351,264	.0000	\$ 1,155
2,000 -	2,999	129,516	\$ 649,021,130	\$ 27,959,671	.8878	\$ 2,489
3,000 -	3,999	118,282	\$ 682,394,283	\$ 33,373,153	.8720	\$ 3,491
4,000 -	4,999	108,723	\$ 718,476,507	\$ 36,082,224	.8575	\$ 4,487
5,000 -	5,999	100,681	\$ 757,903,171	\$ 39,426,664	.8442	\$ 5,494
6,000 -	6,999	93,505	\$ 799,518,930	\$ 41,615,759	.8318	\$ 6,486
7,000 -	7,999	87,089	\$ 842,384,678	\$ 42,865,748	.8203	\$ 7,487
8,000 -	8,999	81,364	\$ 883,754,455	\$ 41,369,777	.8096	\$ 8,488
9,000 -	9,999	76,490	\$ 924,339,904	\$ 40,585,449	.7995	\$ 9,485
10,000 -	10,999	72,211	\$ 965,885,804	\$ 41,545,900	.7900	\$ 10,486
11,000 -	11,999	68,249	\$ 1,005,419,385	\$ 39,533,581	.7811	\$ 11,489
12,000 -	12,999	64,808	\$ 1,044,349,483	\$ 38,930,098	.7726	\$ 12,482
13,000 -	13,999	61,689	\$ 1,082,247,917	\$ 37,898,434	.7645	\$ 13,487
14,000 -	14,999	58,879	\$ 1,117,552,605	\$ 35,304,688	.7569	\$ 14,505
15,000 -	15,999	56,445	\$ 1,152,410,065	\$ 34,857,460	.7495	\$ 15,492
16,000 -	16,999	54,195	\$ 1,186,220,224	\$ 33,810,159	.7425	\$ 16,493
17,000 -	17,999	52,145	\$ 1,218,852,572	\$ 32,632,348	.7357	\$ 17,507
18,000 -	18,999	50,281	\$ 1,250,457,113	\$ 31,604,541	.7291	\$ 18,493
19,000 -	19,999	48,572	\$ 1,283,234,738	\$ 32,777,625	.7228	\$ 19,487
20,000 -	20,999	46,890	\$ 1,313,822,259	\$ 30,587,521	.7168	\$ 20,487
21,000 -	21,999	45,397	\$ 1,343,403,149	\$ 29,580,890	.7109	\$ 21,498
22,000 -	22,999	44,021	\$ 1,373,551,313	\$ 30,148,164	.7052	\$ 22,499
23,000 -	23,999	42,681	\$ 1,402,599,321	\$ 29,048,008	.6996	\$ 23,502
24,000 -	24,999	41,445	\$ 1,431,591,747	\$ 28,992,426	.6943	\$ 24,487
25,000 -	25,999	40,261	\$ 1,458,659,965	\$ 27,068,218	.6891	\$ 25,488
26,000 -	26,999	39,199	\$ 1,484,748,752	\$ 26,088,787	.6840	\$ 26,486
27,000 -	27,999	38,214	\$ 1,511,480,742	\$ 26,731,990	.6791	\$ 27,502
28,000 -	28,999	37,242	\$ 1,536,667,599	\$ 25,186,857	.6743	\$ 28,492
29,000 -	29,999	36,358	\$ 1,561,172,198	\$ 24,504,599	.6696	\$ 29,488
30,000 -	30,999	35,527	\$ 1,585,202,846	\$ 24,030,648	.6650	\$ 30,496
31,000 -	31,999	34,739	\$ 1,609,130,007	\$ 23,927,161	.6605	\$ 31,483
32,000 -	32,999	33,979	\$ 1,630,179,946	\$ 21,049,939	.6561	\$ 32,484
33,000 -	33,999	33,331	\$ 1,651,978,716	\$ 21,798,770	.6518	\$ 33,485
34,000 -	34,999	32,680	\$ 1,674,437,027	\$ 22,458,311	.6476	\$ 34,498
35,000 -	35,999	32,029	\$ 1,693,329,578	\$ 18,892,551	.6435	\$ 35,512
36,000 -	36,999	31,497	\$ 1,713,289,215	\$ 19,959,637	.6395	\$ 36,489
37,000 -	37,999	30,950	\$ 1,733,059,943	\$ 19,770,728	.6355	\$ 37,516
38,000 -	38,999	30,423	\$ 1,752,265,105	\$ 19,205,162	.6316	\$ 38,487
39,000 -	39,999	29,924	\$ 1,772,952,667	\$ 20,687,562	.6277	\$ 39,480
40,000 -	40,999	29,400	\$ 1,791,980,661	\$ 19,027,994	.6239	\$ 40,485
41,000 -	41,999	28,930	\$ 1,811,111,364	\$ 19,130,703	.6202	\$ 41,498
42,000 -	42,999	28,469	\$ 1,828,365,714	\$ 17,254,350	.6166	\$ 42,498
43,000 -	43,999	28,063	\$ 1,845,331,340	\$ 16,965,626	.6129	\$ 43,502
44,000 -	44,999	27,673	\$ 1,863,402,515	\$ 18,071,175	.6094	\$ 44,510
45,000 -	45,999	27,267	\$ 1,879,242,622	\$ 15,840,107	.6059	\$ 45,518
46,000 -	46,999	26,919	\$ 1,897,372,649	\$ 18,130,027	.6024	\$ 46,487
47,000 -	47,999	26,529	\$ 1,914,670,033	\$ 17,297,384	.5990	\$ 47,520
48,000 -	48,999	26,165	\$ 1,931,310,291	\$ 16,640,258	.5957	\$ 48,514
49,000 -	49,999	25,822	\$ 1,949,378,574	\$ 18,068,283	.5924	\$ 49,502
50,000 -	50,999	25,457	\$ 1,964,523,730	\$ 15,145,156	.5891	\$ 50,484

PENNSYLVANIA  
DISTRIBUTION OF LOSSES

LIMITS	ACCUMULATED CLAIMS (ADDED UP)	NUMBER OF CLAIMS	ACCUMULATED LOSSES (ADDED DOWN)	INDEMNITY AND MEDICAL	EXCESS RATIO	AVERAGE
51,000 -	51,999	279	\$ 1,978,891,451	\$ 14,367,721	.5859	\$ 51,497
52,000 -	52,999	294	\$ 1,994,326,508	\$ 15,435,057	.5827	\$ 52,500
53,000 -	53,999	245	\$ 2,007,434,712	\$ 13,108,204	.5795	\$ 53,503
54,000 -	54,999	281	\$ 2,022,749,786	\$ 15,315,074	.5764	\$ 54,502
55,000 -	55,999	274	\$ 2,037,957,881	\$ 15,208,095	.5733	\$ 55,504
56,000 -	56,999	254	\$ 2,052,308,621	\$ 14,350,740	.5703	\$ 56,499
57,000 -	57,999	247	\$ 2,066,513,766	\$ 14,205,145	.5672	\$ 57,511
58,000 -	58,999	246	\$ 2,080,899,163	\$ 14,385,397	.5643	\$ 58,477
59,000 -	59,999	227	\$ 2,094,402,370	\$ 13,503,207	.5613	\$ 59,485
60,000 -	60,999	223	\$ 2,107,900,807	\$ 13,498,437	.5584	\$ 60,531
61,000 -	61,999	194	\$ 2,119,833,614	\$ 11,932,807	.5555	\$ 61,509
62,000 -	62,999	212	\$ 2,133,082,106	\$ 13,248,492	.5526	\$ 62,493
63,000 -	63,999	246	\$ 2,148,701,839	\$ 15,619,733	.5498	\$ 63,495
64,000 -	64,999	222	\$ 2,163,017,563	\$ 14,315,724	.5470	\$ 64,485
65,000 -	65,999	211	\$ 2,176,840,343	\$ 13,822,780	.5442	\$ 65,511
66,000 -	66,999	215	\$ 2,191,139,318	\$ 14,298,975	.5414	\$ 66,507
67,000 -	67,999	204	\$ 2,204,912,964	\$ 13,773,646	.5387	\$ 67,518
68,000 -	68,999	198	\$ 2,218,473,402	\$ 13,560,438	.5360	\$ 68,487
69,000 -	69,999	209	\$ 2,232,991,588	\$ 14,518,186	.5333	\$ 69,465
70,000 -	70,999	184	\$ 2,245,958,312	\$ 12,966,724	.5307	\$ 70,471
71,000 -	71,999	169	\$ 2,258,044,930	\$ 12,086,618	.5280	\$ 71,518
72,000 -	72,999	181	\$ 2,271,164,646	\$ 13,119,716	.5254	\$ 72,485
73,000 -	73,999	182	\$ 2,284,539,260	\$ 13,374,614	.5229	\$ 73,487
74,000 -	74,999	181	\$ 2,298,022,796	\$ 13,483,536	.5203	\$ 74,495
75,000 -	75,999	180	\$ 2,311,613,370	\$ 13,590,574	.5178	\$ 75,503
76,000 -	76,999	160	\$ 2,323,853,694	\$ 12,240,324	.5153	\$ 76,502
77,000 -	77,999	157	\$ 2,336,020,842	\$ 12,167,148	.5128	\$ 77,498
78,000 -	78,999	171	\$ 2,349,441,306	\$ 13,420,464	.5103	\$ 78,482
79,000 -	79,999	159	\$ 2,362,082,242	\$ 12,640,936	.5079	\$ 79,503
80,000 -	80,999	183	\$ 2,376,811,503	\$ 14,729,261	.5054	\$ 80,488
81,000 -	81,999	159	\$ 2,389,769,289	\$ 12,957,786	.5030	\$ 81,496
82,000 -	82,999	146	\$ 2,401,817,293	\$ 12,048,004	.5006	\$ 82,521
83,000 -	83,999	165	\$ 2,415,594,350	\$ 13,777,057	.4983	\$ 83,497
84,000 -	84,999	167	\$ 2,429,703,123	\$ 14,108,773	.4959	\$ 84,484
85,000 -	85,999	166	\$ 2,443,893,592	\$ 14,190,469	.4936	\$ 85,485
86,000 -	86,999	170	\$ 2,458,603,602	\$ 14,710,010	.4913	\$ 86,529
87,000 -	87,999	140	\$ 2,470,851,809	\$ 12,248,207	.4890	\$ 87,487
88,000 -	88,999	157	\$ 2,484,744,890	\$ 13,893,081	.4868	\$ 88,491
89,000 -	89,999	150	\$ 2,498,171,967	\$ 13,427,077	.4845	\$ 89,514
90,000 -	90,999	157	\$ 2,512,375,708	\$ 14,203,741	.4823	\$ 90,470
91,000 -	91,999	131	\$ 2,524,367,125	\$ 11,991,417	.4801	\$ 91,538
92,000 -	92,999	133	\$ 2,536,667,238	\$ 12,300,113	.4779	\$ 92,482
93,000 -	93,999	134	\$ 2,549,196,430	\$ 12,529,192	.4757	\$ 93,501
94,000 -	94,999	127	\$ 2,561,194,697	\$ 11,998,267	.4736	\$ 94,475
95,000 -	95,999	123	\$ 2,572,938,616	\$ 11,743,919	.4715	\$ 95,479
96,000 -	96,999	154	\$ 2,587,802,914	\$ 14,864,298	.4693	\$ 96,521
97,000 -	97,999	131	\$ 2,600,569,296	\$ 12,766,382	.4672	\$ 97,453
98,000 -	98,999	133	\$ 2,613,674,077	\$ 13,104,781	.4652	\$ 98,532
99,000 -	99,999	133	\$ 2,626,908,522	\$ 13,234,445	.4631	\$ 99,507
100,000 -	109,999	1,179	\$ 2,750,592,016	\$ 123,683,494	.4610	\$ 104,905
110,000 -	119,999	1,030	\$ 2,868,984,910	\$ 118,392,894	.4414	\$ 114,945

PENNSYLVANIA  
DISTRIBUTION OF LOSSES

LIMITS	ACCUMULATED CLAIMS (ADDED UP)	NUMBER OF CLAIMS	ACCUMULATED LOSSES (ADDED DOWN)	INDEMNITY AND MEDICAL	EXCESS RATIO	AVERAGE
120,000 -	129,999	911	\$ 2,982,857,101	\$ 113,872,191	.4232	\$ 124,997
130,000 -	139,999	852	\$ 3,097,893,810	\$ 115,036,709	.4062	\$ 135,020
140,000 -	149,999	742	\$ 3,205,346,067	\$ 107,452,257	.3903	\$ 144,814
150,000 -	159,999	681	\$ 3,310,808,872	\$ 105,462,805	.3755	\$ 154,865
160,000 -	169,999	655	\$ 3,418,899,296	\$ 108,090,424	.3615	\$ 165,024
170,000 -	179,999	581	\$ 3,520,575,508	\$ 101,676,212	.3484	\$ 175,002
180,000 -	189,999	515	\$ 3,615,800,165	\$ 95,224,657	.3361	\$ 184,902
190,000 -	199,999	462	\$ 3,705,777,379	\$ 89,977,214	.3245	\$ 194,756
200,000 -	209,999	443	\$ 3,796,559,668	\$ 90,782,289	.3136	\$ 204,926
210,000 -	219,999	442	\$ 3,891,504,626	\$ 94,944,958	.3031	\$ 214,808
220,000 -	229,999	378	\$ 3,976,552,805	\$ 85,048,179	.2933	\$ 224,995
230,000 -	239,999	340	\$ 4,056,470,396	\$ 79,917,591	.2840	\$ 235,052
240,000 -	249,999	333	\$ 4,138,012,677	\$ 81,542,281	.2751	\$ 244,872
250,000 -	259,999	289	\$ 4,211,717,468	\$ 73,704,791	.2667	\$ 255,034
260,000 -	269,999	289	\$ 4,288,375,693	\$ 76,658,225	.2587	\$ 265,253
270,000 -	279,999	285	\$ 4,366,803,749	\$ 78,428,056	.2510	\$ 275,186
280,000 -	289,999	273	\$ 4,444,643,387	\$ 77,839,638	.2437	\$ 285,127
290,000 -	299,999	240	\$ 4,515,396,319	\$ 70,752,932	.2367	\$ 294,804
300,000 -	314,999	312	\$ 4,611,159,314	\$ 95,762,995	.2301	\$ 306,933
315,000 -	329,999	283	\$ 4,702,445,213	\$ 91,285,899	.2207	\$ 322,565
330,000 -	344,999	293	\$ 4,801,387,899	\$ 98,942,686	.2119	\$ 337,688
345,000 -	359,999	287	\$ 4,902,499,404	\$ 101,111,505	.2036	\$ 352,305
360,000 -	374,999	232	\$ 4,987,793,809	\$ 85,294,405	.1958	\$ 367,648
375,000 -	389,999	274	\$ 5,092,534,584	\$ 104,740,775	.1886	\$ 382,266
390,000 -	404,999	215	\$ 5,177,896,318	\$ 85,361,734	.1819	\$ 397,031
405,000 -	419,999	213	\$ 5,265,684,625	\$ 87,788,307	.1756	\$ 412,152
420,000 -	439,999	239	\$ 5,368,185,654	\$ 102,501,029	.1697	\$ 428,875
440,000 -	459,999	216	\$ 5,465,338,629	\$ 97,152,975	.1625	\$ 449,782
460,000 -	479,999	163	\$ 5,541,988,712	\$ 76,650,083	.1558	\$ 470,246
480,000 -	499,999	193	\$ 5,636,675,942	\$ 94,687,230	.1496	\$ 490,607
500,000 -	519,999	160	\$ 5,718,329,201	\$ 81,653,259	.1439	\$ 510,333
520,000 -	539,999	155	\$ 5,800,491,278	\$ 82,162,077	.1386	\$ 530,078
540,000 -	559,999	115	\$ 5,863,749,456	\$ 63,258,178	.1337	\$ 550,071
560,000 -	579,999	130	\$ 5,937,819,003	\$ 74,069,547	.1292	\$ 569,766
580,000 -	599,999	109	\$ 6,002,153,609	\$ 64,334,606	.1249	\$ 590,226
600,000 -	629,999	139	\$ 6,087,635,935	\$ 85,482,326	.1210	\$ 614,981
630,000 -	659,999	127	\$ 6,169,559,507	\$ 81,923,572	.1156	\$ 645,067
660,000 -	699,999	172	\$ 6,286,498,032	\$ 116,938,525	.1107	\$ 679,875
700,000 -	749,999	144	\$ 6,390,423,413	\$ 103,925,381	.1049	\$ 721,704
750,000 -	799,999	112	\$ 6,477,230,856	\$ 86,807,443	.0988	\$ 775,066
800,000 -	849,999	114	\$ 6,571,087,563	\$ 93,856,707	.0934	\$ 823,304
850,000 -	899,999	64	\$ 6,627,145,378	\$ 56,057,815	.0887	\$ 875,903
900,000 -	999,999	145	\$ 6,764,700,140	\$ 137,554,762	.0846	\$ 948,654
1,000,000 -	1,099,999	86	\$ 6,855,220,277	\$ 90,520,137	.0778	\$ 1,052,560
1,100,000 -	1,199,999	52	\$ 6,915,184,146	\$ 59,963,869	.0723	\$ 1,153,151
1,200,000 -	1,299,999	38	\$ 6,962,547,651	\$ 47,363,505	.0678	\$ 1,246,408
1,300,000 -	1,399,999	33	\$ 7,007,090,098	\$ 44,542,447	.0639	\$ 1,349,771
1,400,000 -	1,499,999	32	\$ 7,053,421,186	\$ 46,331,088	.0604	\$ 1,447,847
1,500,000 -	1,599,999	24	\$ 7,090,478,493	\$ 37,057,307	.0573	\$ 1,544,054
1,600,000 -	1,699,999	19	\$ 7,121,825,355	\$ 31,346,862	.0546	\$ 1,649,835
1,700,000 -	1,799,999	13	\$ 7,144,596,917	\$ 22,771,562	.0521	\$ 1,751,659

PENNSYLVANIA  
DISTRIBUTION OF LOSSES

LIMITS	ACCUMULATED CLAIMS (ADDED UP)	NUMBER OF CLAIMS	ACCUMULATED LOSSES (ADDED DOWN)	INDEMNITY AND MEDICAL	EXCESS RATIO	AVERAGE
1,800,000 -	1,899,999	170	\$ 7,166,932,445	\$ 22,335,528	.0499	\$ 1,861,294
1,900,000 -	1,999,999	158	\$ 7,182,515,506	\$ 15,583,061	.0477	\$ 1,947,883
2,000,000 -	2,999,999	150	\$ 7,357,255,238	\$ 174,739,732	.0458	\$ 2,393,695
3,000,000 -	3,999,999	77	\$ 7,467,749,221	\$ 110,493,983	.0323	\$ 3,452,937
4,000,000 -	4,999,999	45	\$ 7,521,147,127	\$ 53,397,906	.0247	\$ 4,449,826
5,000,000 -	5,999,999	33	\$ 7,586,547,312	\$ 65,400,185	.0198	\$ 5,450,015
6,000,000 -	6,999,999	21	\$ 7,618,883,427	\$ 32,336,115	.0164	\$ 6,467,223
7,000,000 -	7,999,999	16	\$ 7,641,623,092	\$ 22,739,665	.0141	\$ 7,579,888
8,000,000 -	8,999,999	13	\$ 7,658,425,708	\$ 16,802,616	.0122	\$ 8,401,308
9,000,000 -	9,999,999	11	\$ 7,658,425,708	\$ -	.0107	#DIV/0!
10,000,000 - AND GREATER		11	\$ 7,841,535,811	\$ 183,110,103	.0093	\$ 16,646,373
<b>GRAND TOTALS</b>		<b>803,178</b>	<b>EXCLUDING CONTRACT MEDICAL</b>	<b>\$ 7,841,535,811</b>		<b>\$ 9,763</b>

**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 (<)					
				7,841,535,811		
0	10,000	924,339,904	730,967	6,195,085,907	1,265	.7900
10,000	15,000	193,212,701	15,766	5,877,308,206	12,255	.7495
15,000	20,000	165,682,133	9,555	5,620,501,073	17,340	.7168
20,000	25,000	148,357,009	6,629	5,403,419,064	22,380	.6891
25,000	30,000	129,580,451	4,734	5,214,553,613	27,372	.6650
30,000	35,000	113,264,829	3,498	5,046,083,784	32,380	.6435
35,000	40,000	98,515,640	2,629	4,892,583,144	37,473	.6239
40,000	50,000	176,425,907	3,943	4,619,307,237	44,744	.5891
50,000	75,000	348,644,222	5,678	4,060,088,015	61,403	.5178
75,000	100,000	328,885,726	3,786	3,615,327,289	86,869	.4610
100,000	125,000	299,012,484	2,665	3,249,552,305	112,221	.4144
125,000	150,000	279,425,062	2,050	2,944,339,744	136,338	.3755
150,000	175,000	264,391,335	1,627	2,682,610,909	162,552	.3421
175,000	200,000	236,039,977	1,268	2,458,758,432	186,225	.3136
200,000	225,000	228,251,337	1,074	2,262,532,095	212,525	.2885
225,000	250,000	203,983,962	862	2,091,273,134	236,640	.2667
250,000	275,000	189,577,044	721	1,938,608,590	263,119	.2472
275,000	300,000	187,806,598	656	1,804,239,492	286,509	.2301
300,000	325,000	156,620,261	501	1,683,510,898	312,823	.2147
325,000	350,000	163,075,154	483	1,575,177,410	337,630	.2009
350,000	375,000	152,702,075	423	1,478,992,002	360,714	.1886
375,000	400,000	161,648,598	417	1,392,626,738	387,337	.1776
400,000	425,000	141,867,476	344	1,315,919,679	411,907	.1678
425,000	450,000	125,452,259	287	1,247,123,669	436,735	.1590
450,000	475,000	106,064,050	230	1,185,003,370	460,647	.1511
475,000	500,000	113,849,751	234	1,128,359,869	487,058	.1439
500,000	600,000	365,477,667	669	948,982,202	546,304	.1210
600,000	700,000	284,344,423	438	822,837,779	649,188	.1049
700,000	800,000	190,732,824	256	732,304,955	745,050	.0934
800,000	900,000	149,914,522	178	663,590,433	842,216	.0846
900,000	1,000,000	137,554,762	145	609,835,671	948,654	.0778
1,000,000	2,000,000	417,815,366	317	359,020,305	1,318,030	.0458
2,000,000	3,000,000	174,739,732	73	253,280,573	2,393,695	.0323
3,000,000	4,000,000	110,493,983	32	193,786,590	3,452,937	.0247
4,000,000	5,000,000	53,397,906	12	155,388,684	4,449,826	.0198
5,000,000	6,000,000	65,400,185	12	128,988,499	5,450,015	.0164
6,000,000	7,000,000	32,336,115	5	110,652,384	6,467,223	.0141
7,000,000	8,000,000	22,739,665	3	95,912,719	7,579,888	.0122
8,000,000	9,000,000	16,802,616	2	84,110,103	8,401,308	.0107
9,000,000	10,000,000	0	0	73,110,103	0	.0093
10,000,000	& Over	183,110,103	11		16,646,373	
TOTAL/AVERAGE		7,841,535,811	803,178		9,763	

\* 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	
	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio	Fitted Excess Ratio
2,000	.9942	.9942	.9992	.9992	.9894	.9894	.8749	.8749
3,000	.9913	.9913	.9989	.9989	.9841	.9841	.8215	.8215
4,000	.9885	.9885	.9985	.9985	.9789	.9789	.7736	.7736
5,000	.9859	.9859	.9981	.9981	.9737	.9737	.7304	.7304
6,000	.9834	.9834	.9978	.9978	.9686	.9686	.6912	.6912
7,000	.9808	.9808	.9974	.9974	.9634	.9634	.6556	.6556
8,000	.9783	.9783	.9970	.9970	.9584	.9584	.6232	.6232
9,000	.9758	.9758	.9966	.9966	.9534	.9534	.5936	.5936
10,000	.9733	.9733	.9963	.9963	.9484	.9484	.5663	.5663
11,000	.9708	.9708	.9959	.9959	.9435	.9435	.5411	.5411
12,000	.9683	.9683	.9955	.9955	.9387	.9387	.5177	.5177
13,000	.9658	.9658	.9952	.9952	.9339	.9339	.4961	.4961
14,000	.9633	.9633	.9948	.9948	.9291	.9291	.4759	.4759
15,000	.9609	.9609	.9944	.9944	.9244	.9244	.4570	.4570
16,000	.9584	.9584	.9940	.9940	.9197	.9197	.4394	.4394
17,000	.9560	.9560	.9937	.9937	.9151	.9151	.4227	.4227
18,000	.9535	.9535	.9933	.9933	.9105	.9105	.4071	.4071
19,000	.9511	.9511	.9929	.9929	.9059	.9059	.3923	.3923
20,000	.9486	.9486	.9926	.9926	.9014	.9014	.3784	.3784
21,000	.9462	.9462	.9922	.9922	.8969	.8969	.3652	.3652
22,000	.9437	.9437	.9918	.9918	.8925	.8925	.3527	.3527
23,000	.9413	.9413	.9914	.9914	.8881	.8881	.3409	.3409
24,000	.9389	.9389	.9911	.9911	.8837	.8837	.3296	.3296
25,000	.9364	.9364	.9907	.9907	.8793	.8793	.3190	.3190
26,000	.9340	.9340	.9903	.9903	.8750	.8750	.3089	.3089
27,000	.9316	.9316	.9900	.9900	.8707	.8707	.2992	.2992
28,000	.9292	.9292	.9896	.9896	.8665	.8665	.2900	.2900
29,000	.9268	.9268	.9892	.9892	.8622	.8622	.2812	.2812
30,000	.9244	.9244	.9889	.9889	.8581	.8581	.2728	.2728
31,000	.9220	.9220	.9885	.9885	.8539	.8539	.2648	.2648
32,000	.9196	.9196	.9881	.9881	.8498	.8498	.2571	.2571
33,000	.9172	.9172	.9878	.9878	.8456	.8456	.2497	.2497
34,000	.9149	.9149	.9874	.9874	.8416	.8416	.2427	.2427
35,000	.9125	.9125	.9870	.9870	.8375	.8375	.2359	.2359
36,000	.9101	.9101	.9866	.9866	.8335	.8335	.2293	.2293
37,000	.9078	.9078	.9863	.9863	.8295	.8295	.2230	.2230
38,000	.9054	.9054	.9859	.9859	.8255	.8255	.2170	.2170
39,000	.9031	.9031	.9855	.9855	.8215	.8215	.2111	.2111
40,000	.9007	.9007	.9852	.9852	.8176	.8176	.2055	.2055
41,000	.8984	.8984	.9848	.9848	.8137	.8137	.2000	.2000
42,000	.8961	.8961	.9844	.9844	.8098	.8098	.1948	.1948
43,000	.8937	.8937	.9841	.9841	.8059	.8059	.1897	.1897
44,000	.8914	.8914	.9837	.9837	.8021	.8021	.1847	.1847
45,000	.8891	.8891	.9833	.9833	.7983	.7983	.1799	.1799
46,000	.8868	.8868	.9830	.9830	.7945	.7945	.1753	.1753
47,000	.8844	.8844	.9826	.9826	.7907	.7907	.1708	.1708
48,000	.8821	.8821	.9822	.9822	.7870	.7870	.1664	.1664
49,000	.8798	.8798	.9819	.9819	.7833	.7833	.1622	.1622
50,000	.8775	.8775	.9815	.9815	.7796	.7796	.1581	.1581

**PENNSYLVANIA  
DISTRIBUTION OF LOSSES**

Loss Limit	Death-Pareto		PT-Lognormal		PP-Pareto		TT-Pareto	
	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio	Fitted Excess Ratio
51,000	.8752	.8752	.9811	.9811	.7759	.7759	.1541	.1541
52,000	.8729	.8729	.9808	.9808	.7723	.7723	.1502	.1502
53,000	.8707	.8707	.9804	.9804	.7687	.7687	.1464	.1464
54,000	.8684	.8684	.9800	.9800	.7651	.7651	.1427	.1427
55,000	.8661	.8661	.9796	.9796	.7615	.7615	.1392	.1392
56,000	.8638	.8638	.9793	.9793	.7579	.7579	.1357	.1357
57,000	.8615	.8615	.9789	.9789	.7544	.7544	.1323	.1323
58,000	.8592	.8592	.9786	.9786	.7508	.7508	.1290	.1290
59,000	.8570	.8570	.9782	.9782	.7473	.7473	.1257	.1257
60,000	.8547	.8547	.9778	.9778	.7438	.7438	.1226	.1226
61,000	.8524	.8524	.9775	.9775	.7404	.7404	.1195	.1195
62,000	.8502	.8502	.9771	.9771	.7369	.7369	.1165	.1165
63,000	.8480	.8480	.9767	.9767	.7335	.7335	.1136	.1136
64,000	.8457	.8457	.9764	.9764	.7301	.7301	.1107	.1107
65,000	.8435	.8435	.9760	.9760	.7267	.7267	.1079	.1079
66,000	.8413	.8413	.9756	.9756	.7233	.7233	.1052	.1052
67,000	.8391	.8391	.9753	.9753	.7199	.7199	.1026	.1026
68,000	.8369	.8369	.9749	.9749	.7166	.7166	.1000	.1000
69,000	.8347	.8347	.9745	.9745	.7133	.7133	.0974	.0974
70,000	.8325	.8325	.9742	.9742	.7099	.7099	.0950	.0950
71,000	.8303	.8303	.9738	.9738	.7067	.7067	.0926	.0926
72,000	.8281	.8281	.9734	.9734	.7034	.7034	.0903	.0903
73,000	.8259	.8259	.9731	.9731	.7001	.7001	.0880	.0880
74,000	.8238	.8238	.9727	.9727	.6969	.6969	.0857	.0857
75,000	.8216	.8216	.9724	.9724	.6937	.6937	.0836	.0836
76,000	.8194	.8194	.9720	.9720	.6904	.6904	.0814	.0814
77,000	.8172	.8172	.9716	.9716	.6873	.6873	.0794	.0794
78,000	.8150	.8150	.9713	.9713	.6841	.6841	.0773	.0773
79,000	.8129	.8129	.9709	.9709	.6809	.6809	.0753	.0753
80,000	.8107	.8107	.9705	.9705	.6778	.6778	.0734	.0734
81,000	.8086	.8086	.9702	.9702	.6747	.6747	.0715	.0715
82,000	.8064	.8064	.9698	.9698	.6716	.6716	.0696	.0696
83,000	.8043	.8043	.9694	.9694	.6685	.6685	.0678	.0678
84,000	.8022	.8022	.9691	.9691	.6654	.6654	.0660	.0660
85,000	.8001	.8001	.9687	.9687	.6624	.6624	.0643	.0643
86,000	.7979	.7979	.9684	.9684	.6593	.6593	.0626	.0626
87,000	.7958	.7958	.9680	.9680	.6563	.6563	.0609	.0609
88,000	.7937	.7937	.9676	.9676	.6533	.6533	.0593	.0593
89,000	.7916	.7916	.9673	.9673	.6503	.6503	.0578	.0578
90,000	.7895	.7895	.9669	.9669	.6474	.6474	.0563	.0563
91,000	.7874	.7874	.9666	.9666	.6444	.6444	.0548	.0548
92,000	.7853	.7853	.9662	.9662	.6415	.6415	.0533	.0533
93,000	.7832	.7832	.9658	.9658	.6386	.6386	.0519	.0519
94,000	.7811	.7811	.9655	.9655	.6356	.6356	.0506	.0506
95,000	.7790	.7790	.9651	.9651	.6328	.6328	.0492	.0492
96,000	.7769	.7769	.9647	.9647	.6299	.6299	.0479	.0479
97,000	.7748	.7748	.9644	.9644	.6270	.6270	.0467	.0467
98,000	.7727	.7727	.9640	.9640	.6242	.6242	.0454	.0454
99,000	.7706	.7706	.9637	.9637	.6213	.6213	.0442	.0442
100,000	.7685	.7685	.9633	.9633	.6185	.6185	.0431	.0431
110,000	.7477	.7477	.9597	.9597	.5911	.5911	.0330	.0330



**PENNSYLVANIA  
DISTRIBUTION OF LOSSES**

Loss Limit	Death-Pareto		PT-Lognormal		PP-Pareto		TT-Pareto	
	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio	Fitted Excess Ratio
120,000	.7278	.7278	.9562	.9562	.5649	.5649	.0255	.0255
130,000	.7084	.7084	.9526	.9526	.5400	.5400	.0201	.0201
140,000	.6897	.6897	.9491	.9491	.5163	.5163	.0162	.0162
150,000	.6713	.6713	.9456	.9456	.4939	.4939	.0134	.0134
160,000	.6535	.6535	.9421	.9421	.4726	.4726	.0114	.0114
170,000	.6361	.6361	.9386	.9386	.4525	.4525	.0100	.0100
180,000	.6191	.6191	.9351	.9351	.4335	.4335	.0089	.0089
190,000	.6024	.6024	.9316	.9316	.4156	.4156	.0081	.0081
200,000	.5861	.5861	.9281	.9281	.3987	.3987	.0073	.0073
210,000	.5700	.5700	.9246	.9246	.3826	.3826	.0067	.0067
220,000	.5542	.5542	.9212	.9212	.3674	.3674	.0061	.0061
230,000	.5388	.5388	.9178	.9178	.3531	.3531	.0056	.0056
240,000	.5239	.5239	.9144	.9144	.3394	.3394	.0051	.0051
250,000	.5092	.5092	.9110	.9110	.3265	.3265	.0047	.0047
260,000	.4953	.4953	.9076	.9076	.3141	.3141	.0044	.0044
270,000	.4820	.4820	.9043	.9043	.3023	.3023	.0041	.0041
280,000	.4688	.4688	.9010	.9010	.2911	.2911	.0038	.0038
290,000	.4559	.4559	.8977	.8977	.2805	.2805	.0035	.0035
300,000	.4435	.4435	.8944	.8944	.2703	.2703	.0033	.0033
315,000	.4255	.4255	.8896	.8896	.2560	.2560	.0030	.0030
330,000	.4078	.4078	.8848	.8848	.2425	.2425	.0028	.0028
345,000	.3905	.3905	.8800	.8800	.2300	.2300	.0026	.0026
360,000	.3744	.3744	.8753	.8753	.2183	.2183	.0023	.0023
375,000	.3589	.3589	.8707	.8707	.2073	.2073	.0021	.0021
390,000	.3436	.3436	.8661	.8661	.1972	.1972	.0020	.0020
405,000	.3287	.3287	.8616	.8616	.1878	.1878	.0018	.0018
420,000	.3145	.3145	.8571	.8571	.1791	.1791	.0016	.0016
440,000	.2961	.2961	.8512	.8512	.1684	.1684	.0014	.0014
460,000	.2784	.2784	.8453	.8453	.1586	.1586	.0012	.0012
480,000	.2617	.2617	.8395	.8395	.1495	.1495	.0010	.0010
500,000	.2463	.2730	.8338	.8405	.1411	.1433	.0009	.0009
520,000	.2316	.2593	.8281	.8351	.1334	.1356	.0008	.0008
540,000	.2175	.2467	.8226	.8297	.1263	.1287	.0007	.0007
560,000	.2044	.2351	.8171	.8243	.1198	.1223	.0006	.0006
580,000	.1923	.2245	.8116	.8190	.1138	.1165	.0005	.0005
600,000	.1810	.2147	.8062	.8137	.1082	.1111	.0004	.0005
630,000	.1650	.2014	.7982	.8057	.1006	.1039	.0003	.0004
660,000	.1506	.1894	.7903	.7978	.0937	.0974	.0002	.0004
700,000	.1332	.1753	.7800	.7874	.0858	.0897	.0002	.0003
750,000	.1150	.1601	.7672	.7746	.0775	.0815	.0001	.0002
800,000	.0991	.1471	.7547	.7619	.0704	.0745	.0001	.0002
850,000	.0855	.1359	.7424	.7494	.0644	.0685	.0000	.0001
900,000	.0748	.1261	.7301	.7371	.0592	.0633	.0000	.0001
1,000,000	.0612	.1098	.7062	.7131	.0509	.0548	.0000	.0001
1,100,000	.0547	.0970	.6834	.6899	.0445	.0480	.0000	.0001
1,200,000	.0490	.0866	.6616	.6675	.0395	.0426	.0000	.0000
1,300,000	.0434	.0780	.6404	.6459	.0355	.0382	.0000	.0000
1,400,000	.0389	.0708	.6200	.6251	.0320	.0345	.0000	.0000
1,500,000	.0351	.0648	.6004	.6052	.0291	.0314	.0000	.0000
1,600,000	.0314	.0596	.5818	.5860	.0268	.0287	.0000	.0000
1,700,000	.0276	.0551	.5635	.5675	.0248	.0265	.0000	.0000

**PENNSYLVANIA  
DISTRIBUTION OF LOSSES**

Loss Limit	Death-Pareto		PT-Lognormal		PP-Pareto		TT-Pareto	
	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio	Fitted Excess Ratio	Actual Excess Ratio	Fitted Excess Ratio
1,800,000	.0246	.0512	.5456	.5498	.0231	.0245	.0000	.0000
1,900,000	.0218	.0478	.5280	.5328	.0215	.0228	.0000	.0000
2,000,000	.0190	.0447	.5107	.5164	.0202	.0213	.0000	.0000
3,000,000	.0054	.0266	.3782	.3884	.0125	.0123	.0000	.0000
4,000,000	.0000	.0186	.2941	.3010	.0092	.0085	.0000	.0000
5,000,000	.0000	.0142	.2381	.2404	.0071	.0064	.0000	.0000
6,000,000	.0000	.0114	.1979	.1974	.0059	.0051	.0000	.0000
7,000,000	.0000	.0096	.1702	.1661	.0050	.0043	.0000	.0000
8,000,000	.0000	.0083	.1491	.1430	.0042	.0037	.0000	.0000
9,000,000	.0000	.0073	.1322	.1256	.0035	.0032	.0000	.0000
10,000,000	.0000	.0065	.1165	.1123	.0029	.0029	.0000	.0000

## Pennsylvania Compensation Rating Bureau Cumulative Distribution of Loss By Type of Injury ( 2000-2002)

