

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 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 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
1	MEDICAL ONLY	756,861	615,052	\$ 715,352,270	\$ 715,352,270	.0000	\$ 1,163
3	-	1,999 141,809	16,121	\$ 734,156,774	\$ 18,804,504	.0000	\$ 1,166
4	2,000 -	2,999 125,688	9,764	\$ 758,536,009	\$ 24,379,235	.8879	\$ 2,497
5	3,000 -	3,999 115,924	8,680	\$ 788,790,599	\$ 30,254,590	.8741	\$ 3,486
6	4,000 -	4,999 107,244	7,476	\$ 822,312,752	\$ 33,522,153	.8615	\$ 4,484
7	5,000 -	5,999 99,768	6,606	\$ 858,582,646	\$ 36,269,894	.8497	\$ 5,490
8	6,000 -	6,999 93,162	6,069	\$ 897,941,268	\$ 39,358,622	.8387	\$ 6,485
9	7,000 -	7,999 87,093	5,403	\$ 938,399,756	\$ 40,458,488	.8285	\$ 7,488
10	8,000 -	8,999 81,690	4,841	\$ 979,473,041	\$ 41,073,285	.8189	\$ 8,484
11	9,000 -	9,999 76,849	4,196	\$ 1,019,296,384	\$ 39,823,343	.8099	\$ 9,491
12	10,000 -	10,999 72,653	3,719	\$ 1,058,309,132	\$ 39,012,748	.8014	\$ 10,490
13	11,000 -	11,999 68,934	3,409	\$ 1,097,461,262	\$ 39,152,130	.7933	\$ 11,485
14	12,000 -	12,999 65,525	2,995	\$ 1,134,885,138	\$ 37,423,876	.7857	\$ 12,495
15	13,000 -	13,999 62,530	2,845	\$ 1,173,269,402	\$ 38,384,264	.7784	\$ 13,492
16	14,000 -	14,999 59,685	2,492	\$ 1,209,396,633	\$ 36,127,231	.7715	\$ 14,497
17	15,000 -	15,999 57,193	2,172	\$ 1,243,022,653	\$ 33,626,020	.7648	\$ 15,482
18	16,000 -	16,999 55,021	1,991	\$ 1,275,873,751	\$ 32,851,098	.7584	\$ 16,500
19	17,000 -	17,999 53,030	1,820	\$ 1,307,712,252	\$ 31,838,501	.7523	\$ 17,494
20	18,000 -	18,999 51,210	1,693	\$ 1,339,020,752	\$ 31,308,500	.7464	\$ 18,493
21	19,000 -	19,999 49,517	1,591	\$ 1,370,048,367	\$ 31,027,615	.7406	\$ 19,502
22	20,000 -	20,999 47,926	1,468	\$ 1,400,122,686	\$ 30,074,319	.7351	\$ 20,487
23	21,000 -	21,999 46,458	1,424	\$ 1,430,729,614	\$ 30,606,928	.7297	\$ 21,494
24	22,000 -	22,999 45,034	1,245	\$ 1,458,732,166	\$ 28,002,552	.7245	\$ 22,492
25	23,000 -	23,999 43,789	1,205	\$ 1,487,046,144	\$ 28,313,978	.7195	\$ 23,497
26	24,000 -	24,999 42,584	1,070	\$ 1,513,242,123	\$ 26,195,979	.7146	\$ 24,482
27	25,000 -	25,999 41,514	1,131	\$ 1,542,076,856	\$ 28,834,733	.7098	\$ 25,495
28	26,000 -	26,999 40,383	1,006	\$ 1,568,732,263	\$ 26,655,407	.7051	\$ 26,496
29	27,000 -	27,999 39,377	956	\$ 1,595,012,041	\$ 26,279,778	.7006	\$ 27,489
30	28,000 -	28,999 38,421	866	\$ 1,619,691,450	\$ 24,679,409	.6962	\$ 28,498
31	29,000 -	29,999 37,555	807	\$ 1,643,498,145	\$ 23,806,695	.6918	\$ 29,500
32	30,000 -	30,999 36,748	790	\$ 1,667,585,827	\$ 24,087,682	.6876	\$ 30,491
33	31,000 -	31,999 35,958	758	\$ 1,691,470,294	\$ 23,884,467	.6835	\$ 31,510
34	32,000 -	32,999 35,200	653	\$ 1,712,691,356	\$ 21,221,062	.6794	\$ 32,498
35	33,000 -	33,999 34,547	710	\$ 1,736,465,559	\$ 23,774,203	.6755	\$ 33,485
36	34,000 -	34,999 33,837	604	\$ 1,757,301,056	\$ 20,835,497	.6716	\$ 34,496
37	35,000 -	35,999 33,233	581	\$ 1,777,930,876	\$ 20,629,820	.6678	\$ 35,507
38	36,000 -	36,999 32,652	613	\$ 1,800,308,227	\$ 22,377,351	.6640	\$ 36,505
39	37,000 -	37,999 32,039	535	\$ 1,820,374,748	\$ 20,066,521	.6603	\$ 37,508
40	38,000 -	38,999 31,504	518	\$ 1,840,315,489	\$ 19,940,741	.6567	\$ 38,496
41	39,000 -	39,999 30,986	524	\$ 1,861,023,311	\$ 20,707,822	.6532	\$ 39,519
42	40,000 -	40,999 30,462	480	\$ 1,880,471,991	\$ 19,448,680	.6497	\$ 40,518
43	41,000 -	41,999 29,982	496	\$ 1,901,037,333	\$ 20,565,342	.6462	\$ 41,462
44	42,000 -	42,999 29,486	469	\$ 1,920,975,569	\$ 19,938,236	.6428	\$ 42,512
45	43,000 -	43,999 29,017	427	\$ 1,939,554,923	\$ 18,579,354	.6395	\$ 43,511
46	44,000 -	44,999 28,590	436	\$ 1,958,953,590	\$ 19,398,667	.6362	\$ 44,492
47	45,000 -	45,999 28,154	389	\$ 1,976,648,121	\$ 17,694,531	.6330	\$ 45,487
48	46,000 -	46,999 27,765	352	\$ 1,993,020,671	\$ 16,372,550	.6298	\$ 46,513
49	47,000 -	47,999 27,413	354	\$ 2,009,840,581	\$ 16,819,910	.6267	\$ 47,514
50	48,000 -	48,999 27,059	309	\$ 2,024,826,794	\$ 14,986,213	.6236	\$ 48,499
51	49,000 -	49,999 26,750	342	\$ 2,041,750,442	\$ 16,923,648	.6205	\$ 49,484
52	50,000 -	50,999 26,408	286	\$ 2,056,197,138	\$ 14,446,696	.6175	\$ 50,513

PENNSYLVANIA
DISTRIBUTION OF LOSSES

LIMITS			ACCUMULATED CLAIMS (ADDED UP)	NUMBER OF CLAIMS	ACCUMULATED LOSSES (ADDED DOWN)	INDEMNITY AND MEDICAL	EXCESS RATIO	AVERAGE
53	51,000	-	51,999	293	\$ 2,071,280,664	\$ 15,083,526	.6145	\$ 51,480
54	52,000	-	52,999	293	\$ 2,086,671,496	\$ 15,390,832	.6116	\$ 52,528
55	53,000	-	53,999	300	\$ 2,102,720,722	\$ 16,049,226	.6086	\$ 53,497
56	54,000	-	54,999	310	\$ 2,119,619,120	\$ 16,898,398	.6058	\$ 54,511
57	55,000	-	55,999	279	\$ 2,135,105,804	\$ 15,486,684	.6029	\$ 55,508
58	56,000	-	56,999	251	\$ 2,149,285,151	\$ 14,179,347	.6001	\$ 56,491
59	57,000	-	57,999	255	\$ 2,163,944,742	\$ 14,659,591	.5973	\$ 57,489
60	58,000	-	58,999	229	\$ 2,177,344,617	\$ 13,399,875	.5945	\$ 58,515
61	59,000	-	59,999	231	\$ 2,191,088,415	\$ 13,743,798	.5918	\$ 59,497
62	60,000	-	60,999	224	\$ 2,204,643,358	\$ 13,554,943	.5891	\$ 60,513
63	61,000	-	61,999	240	\$ 2,219,405,683	\$ 14,762,325	.5864	\$ 61,510
64	62,000	-	62,999	233	\$ 2,233,970,299	\$ 14,564,616	.5838	\$ 62,509
65	63,000	-	63,999	204	\$ 2,246,929,549	\$ 12,959,250	.5811	\$ 63,526
66	64,000	-	64,999	209	\$ 2,260,408,501	\$ 13,478,952	.5785	\$ 64,493
67	65,000	-	65,999	210	\$ 2,274,165,059	\$ 13,756,558	.5759	\$ 65,507
68	66,000	-	66,999	170	\$ 2,285,462,878	\$ 11,297,819	.5734	\$ 66,458
69	67,000	-	67,999	194	\$ 2,298,564,253	\$ 13,101,375	.5709	\$ 67,533
70	68,000	-	68,999	194	\$ 2,311,850,862	\$ 13,286,609	.5683	\$ 68,488
71	69,000	-	69,999	192	\$ 2,325,196,689	\$ 13,345,827	.5658	\$ 69,510
72	70,000	-	70,999	218	\$ 2,340,558,683	\$ 15,361,994	.5634	\$ 70,468
73	71,000	-	71,999	172	\$ 2,352,855,946	\$ 12,297,263	.5609	\$ 71,496
74	72,000	-	72,999	191	\$ 2,366,700,821	\$ 13,844,875	.5585	\$ 72,486
75	73,000	-	73,999	169	\$ 2,379,124,216	\$ 12,423,395	.5561	\$ 73,511
76	74,000	-	74,999	155	\$ 2,390,675,897	\$ 11,551,681	.5537	\$ 74,527
77	75,000	-	75,999	161	\$ 2,402,830,641	\$ 12,154,744	.5514	\$ 75,495
78	76,000	-	76,999	181	\$ 2,416,680,207	\$ 13,849,566	.5490	\$ 76,517
79	77,000	-	77,999	161	\$ 2,429,158,762	\$ 12,478,555	.5467	\$ 77,507
80	78,000	-	78,999	150	\$ 2,440,939,293	\$ 11,780,531	.5444	\$ 78,537
81	79,000	-	79,999	174	\$ 2,454,773,082	\$ 13,833,789	.5421	\$ 79,505
82	80,000	-	80,999	162	\$ 2,467,817,312	\$ 13,044,230	.5398	\$ 80,520
83	81,000	-	81,999	144	\$ 2,479,555,481	\$ 11,738,169	.5376	\$ 81,515
84	82,000	-	82,999	147	\$ 2,491,686,722	\$ 12,131,241	.5353	\$ 82,525
85	83,000	-	83,999	162	\$ 2,505,216,413	\$ 13,529,691	.5331	\$ 83,517
86	84,000	-	84,999	144	\$ 2,517,383,071	\$ 12,166,658	.5309	\$ 84,491
87	85,000	-	85,999	139	\$ 2,529,270,365	\$ 11,887,294	.5287	\$ 85,520
88	86,000	-	86,999	135	\$ 2,540,950,247	\$ 11,679,882	.5266	\$ 86,518
89	87,000	-	87,999	136	\$ 2,552,854,963	\$ 11,904,716	.5244	\$ 87,535
90	88,000	-	88,999	141	\$ 2,565,339,394	\$ 12,484,431	.5223	\$ 88,542
91	89,000	-	89,999	158	\$ 2,579,482,642	\$ 14,143,248	.5201	\$ 89,514
92	90,000	-	90,999	134	\$ 2,591,608,042	\$ 12,125,400	.5180	\$ 90,488
93	91,000	-	91,999	130	\$ 2,603,507,422	\$ 11,899,380	.5160	\$ 91,534
94	92,000	-	92,999	143	\$ 2,616,733,756	\$ 13,226,334	.5139	\$ 92,492
95	93,000	-	93,999	138	\$ 2,629,634,758	\$ 12,901,002	.5118	\$ 93,486
96	94,000	-	94,999	140	\$ 2,642,867,427	\$ 13,232,669	.5098	\$ 94,519
97	95,000	-	95,999	136	\$ 2,655,852,235	\$ 12,984,808	.5078	\$ 95,477
98	96,000	-	96,999	113	\$ 2,666,754,539	\$ 10,902,304	.5058	\$ 96,481
99	97,000	-	97,999	129	\$ 2,679,330,181	\$ 12,575,642	.5038	\$ 97,486
100	98,000	-	98,999	126	\$ 2,691,741,036	\$ 12,410,855	.5018	\$ 98,499
101	99,000	-	99,999	123	\$ 2,703,983,121	\$ 12,242,085	.4998	\$ 99,529
102	100,000	-	109,999	1,160	\$ 2,825,564,838	\$ 121,581,717	.4979	\$ 104,812
103	110,000	-	119,999	1,049	\$ 2,946,132,371	\$ 120,567,533	.4791	\$ 114,936

PENNSYLVANIA
DISTRIBUTION OF LOSSES

LIMITS			ACCUMULATED CLAIMS (ADDED UP)	NUMBER OF CLAIMS	ACCUMULATED LOSSES (ADDED DOWN)	INDEMNITY AND MEDICAL	EXCESS RATIO	AVERAGE
104	120,000	-	129,999	897	\$ 3,058,208,894	\$ 112,076,523	.4616	\$ 124,946
105	130,000	-	139,999	837	\$ 3,171,155,960	\$ 112,947,066	.4451	\$ 134,943
106	140,000	-	149,999	751	\$ 3,279,853,322	\$ 108,697,362	.4297	\$ 144,737
107	150,000	-	159,999	682	\$ 3,385,469,737	\$ 105,616,415	.4152	\$ 154,863
108	160,000	-	169,999	639	\$ 3,490,846,305	\$ 105,376,568	.4015	\$ 164,909
109	170,000	-	179,999	528	\$ 3,583,272,019	\$ 92,425,714	.3885	\$ 175,049
110	180,000	-	189,999	496	\$ 3,675,022,927	\$ 91,750,908	.3762	\$ 184,982
111	190,000	-	199,999	463	\$ 3,765,228,818	\$ 90,205,891	.3645	\$ 194,829
112	200,000	-	209,999	459	\$ 3,859,310,223	\$ 94,081,405	.3533	\$ 204,970
113	210,000	-	219,999	390	\$ 3,943,192,419	\$ 83,882,196	.3426	\$ 215,083
114	220,000	-	229,999	398	\$ 4,032,742,499	\$ 89,550,080	.3325	\$ 225,000
115	230,000	-	239,999	378	\$ 4,121,513,041	\$ 88,770,542	.3227	\$ 234,843
116	240,000	-	249,999	342	\$ 4,205,255,555	\$ 83,742,514	.3135	\$ 244,861
117	250,000	-	259,999	362	\$ 4,297,555,357	\$ 92,299,802	.3046	\$ 254,972
118	260,000	-	269,999	344	\$ 4,388,589,276	\$ 91,033,919	.2961	\$ 264,633
119	270,000	-	279,999	296	\$ 4,470,028,963	\$ 81,439,687	.2881	\$ 275,134
120	280,000	-	289,999	306	\$ 4,557,233,047	\$ 87,204,084	.2803	\$ 284,981
121	290,000	-	299,999	248	\$ 4,630,342,847	\$ 73,109,800	.2730	\$ 294,798
122	300,000	-	314,999	385	\$ 4,748,597,523	\$ 118,254,676	.2659	\$ 307,155
123	315,000	-	329,999	370	\$ 4,868,003,363	\$ 119,405,840	.2559	\$ 322,718
124	330,000	-	344,999	331	\$ 4,979,731,783	\$ 111,728,420	.2465	\$ 337,548
125	345,000	-	359,999	269	\$ 5,074,685,812	\$ 94,954,029	.2377	\$ 352,989
126	360,000	-	374,999	282	\$ 5,178,407,903	\$ 103,722,091	.2294	\$ 367,809
127	375,000	-	389,999	246	\$ 5,272,427,540	\$ 94,019,637	.2216	\$ 382,194
128	390,000	-	404,999	224	\$ 5,361,414,822	\$ 88,987,282	.2142	\$ 397,265
129	405,000	-	419,999	210	\$ 5,448,008,705	\$ 86,593,883	.2073	\$ 412,352
130	420,000	-	439,999	277	\$ 5,567,060,558	\$ 119,051,853	.2007	\$ 429,790
131	440,000	-	459,999	238	\$ 5,674,078,415	\$ 107,017,857	.1925	\$ 449,655
132	460,000	-	479,999	207	\$ 5,771,456,255	\$ 97,377,840	.1848	\$ 470,424
133	480,000	-	499,999	204	\$ 5,871,540,639	\$ 100,084,384	.1777	\$ 490,610
134	500,000	-	519,999	176	\$ 5,961,213,818	\$ 89,673,179	.1710	\$ 509,507
135	520,000	-	539,999	172	\$ 6,052,270,003	\$ 91,056,185	.1648	\$ 529,396
136	540,000	-	559,999	134	\$ 6,125,986,748	\$ 73,716,745	.1589	\$ 550,125
137	560,000	-	579,999	164	\$ 6,219,406,916	\$ 93,420,168	.1534	\$ 569,635
138	580,000	-	599,999	145	\$ 6,304,975,231	\$ 85,568,315	.1483	\$ 590,126
139	600,000	-	629,999	180	\$ 6,415,621,908	\$ 110,646,677	.1435	\$ 614,704
140	630,000	-	659,999	147	\$ 6,510,531,047	\$ 94,909,139	.1368	\$ 645,640
141	660,000	-	699,999	188	\$ 6,638,141,107	\$ 127,610,060	.1307	\$ 678,777
142	700,000	-	749,999	188	\$ 6,774,026,110	\$ 135,885,003	.1234	\$ 722,793
143	750,000	-	799,999	193	\$ 6,923,278,834	\$ 149,252,724	.1153	\$ 773,330
144	800,000	-	849,999	132	\$ 7,032,113,697	\$ 108,834,863	.1083	\$ 824,507
145	850,000	-	899,999	112	\$ 7,130,002,115	\$ 97,888,418	.1021	\$ 874,004
146	900,000	-	999,999	170	\$ 7,290,541,129	\$ 160,539,014	.0967	\$ 944,347
147	1,000,000	-	1,099,999	146	\$ 7,443,521,030	\$ 152,979,901	.0876	\$ 1,047,808
148	1,100,000	-	1,199,999	85	\$ 7,541,133,218	\$ 97,612,188	.0801	\$ 1,148,379
149	1,200,000	-	1,299,999	81	\$ 7,642,521,232	\$ 101,388,014	.0740	\$ 1,251,704
150	1,300,000	-	1,399,999	64	\$ 7,728,713,260	\$ 86,192,028	.0687	\$ 1,346,750
151	1,400,000	-	1,499,999	41	\$ 7,787,995,371	\$ 59,282,111	.0644	\$ 1,445,905
152	1,500,000	-	1,599,999	34	\$ 7,840,459,311	\$ 52,463,940	.0606	\$ 1,543,057
153	1,600,000	-	1,699,999	29	\$ 7,888,175,429	\$ 47,716,118	.0573	\$ 1,645,383
154	1,700,000	-	1,799,999	24	\$ 7,930,128,958	\$ 41,953,529	.0543	\$ 1,748,064

PENNSYLVANIA
DISTRIBUTION OF LOSSES

LIMITS			ACCUMULATED CLAIMS (ADDED UP)	NUMBER OF CLAIMS	ACCUMULATED LOSSES (ADDED DOWN)	INDEMNITY AND MEDICAL	EXCESS RATIO	AVERAGE
155	1,800,000	-	1,899,999	226	\$ 7,972,502,093	\$ 42,373,135	.0516	\$ 1,842,310
156	1,900,000	-	1,999,999	203	\$ 8,007,888,546	\$ 35,386,453	.0491	\$ 1,965,914
157	2,000,000	-	2,999,999	185	\$ 8,230,665,378	\$ 222,776,832	.0469	\$ 2,421,487
158	3,000,000	-	3,999,999	93	\$ 8,369,519,247	\$ 138,853,869	.0319	\$ 3,471,347
159	4,000,000	-	4,999,999	53	\$ 8,440,023,492	\$ 70,504,245	.0237	\$ 4,406,515
160	5,000,000	-	5,999,999	37	\$ 8,504,903,315	\$ 64,879,823	.0188	\$ 5,406,652
161	6,000,000	-	6,999,999	25	\$ 8,531,007,210	\$ 26,103,895	.0154	\$ 6,525,974
162	7,000,000	-	7,999,999	21	\$ 8,583,946,567	\$ 52,939,357	.0128	\$ 7,562,765
163	8,000,000	-	8,999,999	14	\$ 8,600,266,908	\$ 16,320,341	.0107	\$ 8,160,171
164	9,000,000	-	9,999,999	12	\$ 8,619,110,720	\$ 18,843,812	.0093	\$ 9,421,906
165	10,000,000	-	AND GREATER	10	\$ 8,790,161,429	\$ 171,050,709	.0081	\$ 17,105,071
GRAND TOTALS				756,861	EXCLUDING CONTRACT MEDICAL	\$ 8,790,161,429		\$ 11,614

**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 (<)					
				8,790,161,429		
0	10,000	1,019,296,384	684,208	7,044,335,045	1,490	.8014
10,000	15,000	190,100,249	15,460	6,722,869,796	12,296	.7648
15,000	20,000	160,651,734	9,267	6,461,593,062	17,336	.7351
20,000	25,000	143,193,756	6,412	6,239,069,306	22,332	.7098
25,000	30,000	130,256,022	4,766	6,044,223,284	27,330	.6876
30,000	35,000	113,802,911	3,515	5,869,705,373	32,376	.6678
35,000	40,000	103,722,255	2,771	5,710,658,118	37,431	.6497
40,000	50,000	180,727,131	4,054	5,428,010,987	44,580	.6175
50,000	75,000	348,925,455	5,702	4,846,535,532	61,194	.5514
75,000	100,000	313,307,224	3,607	4,376,278,308	86,861	.4979
100,000	125,000	298,187,512	2,658	3,982,803,296	112,206	.4531
125,000	150,000	277,682,690	2,037	3,649,558,107	136,353	.4152
150,000	175,000	257,205,840	1,585	3,359,602,267	162,275	.3822
175,000	200,000	228,169,656	1,223	3,105,532,611	186,566	.3533
200,000	225,000	222,738,641	1,048	2,878,668,970	212,537	.3275
225,000	250,000	217,288,096	919	2,677,405,874	236,440	.3046
250,000	275,000	224,053,565	854	2,497,452,309	262,358	.2841
275,000	300,000	201,033,728	702	2,337,618,582	286,373	.2659
300,000	325,000	197,858,569	632	2,193,201,679	313,233	.2495
325,000	350,000	183,181,710	544	2,064,361,636	336,731	.2348
350,000	375,000	167,024,777	461	1,947,878,526	362,048	.2216
375,000	400,000	153,344,492	395	1,841,742,368	387,887	.2095
400,000	425,000	146,019,274	354	1,745,096,011	412,581	.1985
425,000	450,000	142,797,818	327	1,657,141,942	437,025	.1885
450,000	475,000	126,542,309	274	1,576,843,384	461,412	.1794
475,000	500,000	124,428,844	256	1,503,120,790	486,525	.1710
500,000	600,000	433,434,592	791	1,261,186,198	547,958	.1435
600,000	700,000	333,165,876	515	1,084,520,322	646,924	.1234
700,000	800,000	285,137,727	381	951,682,595	748,393	.1083
800,000	900,000	206,723,281	244	850,159,314	847,227	.0967
900,000	1,000,000	160,539,014	170	769,620,300	944,347	.0876
1,000,000	2,000,000	717,347,417	545	412,272,883	1,316,234	.0469
2,000,000	3,000,000	222,776,832	92	280,496,051	2,421,487	.0319
3,000,000	4,000,000	138,853,869	40	208,642,182	3,471,347	.0237
4,000,000	5,000,000	70,504,245	16	165,137,937	4,406,515	.0188
5,000,000	6,000,000	64,879,823	12	135,258,114	5,406,652	.0154
6,000,000	7,000,000	26,103,895	4	112,154,219	6,525,974	.0128
7,000,000	8,000,000	52,939,357	7	94,214,862	7,562,765	.0107
8,000,000	9,000,000	16,320,341	2	81,894,521	8,160,171	.0093
9,000,000	10,000,000	18,843,812	2	71,050,709	9,421,906	.0081
10,000,000	& Over	171,050,709	10		17,105,071	
TOTAL/AVERAGE		8,790,161,429	756,861		11,614	

* 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	.9951	.9955	.9993	.9993	.9907	.9909	.8814	.8814
3,000	.9927	.9933	.9989	.9990	.9861	.9863	.8298	.8298
4,000	.9904	.9912	.9986	.9986	.9815	.9818	.7832	.7833
5,000	.9882	.9892	.9982	.9983	.9769	.9773	.7410	.7411
6,000	.9860	.9871	.9978	.9979	.9724	.9728	.7026	.7026
7,000	.9838	.9851	.9975	.9976	.9679	.9684	.6675	.6675
8,000	.9816	.9832	.9971	.9973	.9635	.9640	.6354	.6354
9,000	.9795	.9812	.9968	.9969	.9591	.9597	.6059	.6060
10,000	.9774	.9792	.9964	.9966	.9547	.9554	.5788	.5788
11,000	.9752	.9773	.9960	.9962	.9504	.9511	.5537	.5537
12,000	.9731	.9753	.9957	.9959	.9461	.9469	.5304	.5304
13,000	.9710	.9734	.9953	.9955	.9419	.9428	.5087	.5087
14,000	.9689	.9714	.9950	.9952	.9377	.9387	.4885	.4885
15,000	.9668	.9695	.9946	.9949	.9336	.9346	.4696	.4697
16,000	.9647	.9676	.9942	.9945	.9295	.9305	.4519	.4520
17,000	.9626	.9657	.9939	.9942	.9254	.9265	.4353	.4353
18,000	.9606	.9638	.9935	.9938	.9213	.9225	.4196	.4196
19,000	.9585	.9619	.9932	.9935	.9173	.9185	.4048	.4048
20,000	.9564	.9600	.9928	.9931	.9133	.9146	.3907	.3908
21,000	.9544	.9581	.9924	.9928	.9093	.9107	.3775	.3775
22,000	.9523	.9562	.9921	.9925	.9054	.9068	.3649	.3650
23,000	.9503	.9544	.9917	.9921	.9015	.9030	.3530	.3531
24,000	.9482	.9525	.9914	.9918	.8976	.8992	.3417	.3417
25,000	.9462	.9506	.9910	.9914	.8938	.8954	.3309	.3310
26,000	.9441	.9487	.9906	.9911	.8899	.8916	.3206	.3207
27,000	.9421	.9468	.9903	.9907	.8861	.8878	.3109	.3109
28,000	.9400	.9450	.9899	.9904	.8823	.8841	.3015	.3016
29,000	.9380	.9431	.9896	.9901	.8786	.8804	.2927	.2927
30,000	.9360	.9412	.9892	.9897	.8749	.8767	.2842	.2842
31,000	.9339	.9394	.9888	.9894	.8712	.8731	.2760	.2761
32,000	.9319	.9375	.9885	.9890	.8675	.8695	.2682	.2683
33,000	.9299	.9356	.9881	.9887	.8638	.8659	.2607	.2608
34,000	.9278	.9338	.9878	.9883	.8602	.8623	.2535	.2536
35,000	.9258	.9319	.9874	.9880	.8566	.8587	.2466	.2467
36,000	.9238	.9301	.9870	.9877	.8530	.8552	.2400	.2401
37,000	.9218	.9283	.9867	.9873	.8494	.8517	.2336	.2337
38,000	.9198	.9264	.9863	.9870	.8459	.8482	.2275	.2275
39,000	.9178	.9246	.9860	.9866	.8424	.8447	.2216	.2216
40,000	.9158	.9228	.9856	.9863	.8389	.8413	.2159	.2159
41,000	.9138	.9209	.9852	.9859	.8354	.8379	.2104	.2104
42,000	.9119	.9191	.9849	.9856	.8319	.8345	.2051	.2051
43,000	.9099	.9173	.9845	.9853	.8285	.8311	.2000	.2000
44,000	.9079	.9155	.9842	.9849	.8251	.8277	.1950	.1951
45,000	.9059	.9137	.9838	.9846	.8217	.8244	.1903	.1904
46,000	.9040	.9119	.9834	.9842	.8183	.8211	.1857	.1858
47,000	.9020	.9101	.9831	.9839	.8150	.8178	.1812	.1813
48,000	.9000	.9083	.9827	.9835	.8117	.8145	.1769	.1770
49,000	.8981	.9065	.9824	.9832	.8083	.8112	.1727	.1727
50,000	.8962	.9047	.9820	.9828	.8051	.8080	.1686	.1686

**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	.8942	.9029	.9816	.9825	.8018	.8048	.1646	.1647
52,000	.8923	.9012	.9813	.9822	.7985	.8016	.1607	.1608
53,000	.8904	.8994	.9809	.9818	.7953	.7984	.1569	.1570
54,000	.8885	.8976	.9806	.9815	.7921	.7952	.1533	.1534
55,000	.8865	.8959	.9802	.9811	.7889	.7921	.1497	.1498
56,000	.8846	.8941	.9799	.9808	.7857	.7889	.1462	.1463
57,000	.8827	.8923	.9795	.9805	.7826	.7858	.1429	.1429
58,000	.8808	.8906	.9791	.9801	.7794	.7827	.1396	.1397
59,000	.8789	.8888	.9788	.9798	.7763	.7797	.1364	.1365
60,000	.8770	.8871	.9784	.9794	.7732	.7766	.1333	.1333
61,000	.8750	.8853	.9781	.9791	.7701	.7735	.1302	.1303
62,000	.8731	.8836	.9777	.9788	.7670	.7705	.1272	.1273
63,000	.8712	.8818	.9774	.9784	.7639	.7675	.1243	.1244
64,000	.8693	.8801	.9770	.9781	.7609	.7645	.1215	.1216
65,000	.8674	.8784	.9766	.9777	.7579	.7615	.1187	.1188
66,000	.8655	.8766	.9763	.9774	.7549	.7585	.1160	.1161
67,000	.8636	.8749	.9759	.9771	.7519	.7556	.1134	.1135
68,000	.8617	.8731	.9756	.9767	.7489	.7527	.1108	.1109
69,000	.8598	.8714	.9752	.9764	.7459	.7497	.1083	.1083
70,000	.8580	.8697	.9749	.9760	.7430	.7468	.1058	.1059
71,000	.8561	.8679	.9745	.9757	.7400	.7439	.1034	.1034
72,000	.8542	.8662	.9742	.9754	.7371	.7411	.1010	.1011
73,000	.8524	.8645	.9738	.9750	.7342	.7382	.0987	.0988
74,000	.8505	.8628	.9734	.9747	.7313	.7354	.0964	.0965
75,000	.8487	.8611	.9731	.9743	.7284	.7325	.0942	.0943
76,000	.8468	.8594	.9727	.9740	.7256	.7297	.0920	.0921
77,000	.8450	.8578	.9724	.9737	.7227	.7269	.0899	.0900
78,000	.8432	.8561	.9720	.9733	.7199	.7241	.0878	.0879
79,000	.8413	.8544	.9717	.9730	.7171	.7213	.0858	.0859
80,000	.8395	.8527	.9713	.9727	.7143	.7186	.0838	.0839
81,000	.8377	.8510	.9710	.9723	.7115	.7158	.0819	.0820
82,000	.8359	.8494	.9706	.9720	.7087	.7131	.0800	.0801
83,000	.8340	.8477	.9702	.9716	.7060	.7104	.0781	.0782
84,000	.8322	.8460	.9699	.9713	.7032	.7077	.0763	.0764
85,000	.8304	.8444	.9695	.9710	.7005	.7050	.0745	.0746
86,000	.8286	.8427	.9692	.9706	.6977	.7023	.0728	.0729
87,000	.8268	.8411	.9688	.9703	.6950	.6996	.0711	.0712
88,000	.8250	.8394	.9685	.9699	.6923	.6970	.0694	.0695
89,000	.8232	.8377	.9681	.9696	.6897	.6943	.0678	.0678
90,000	.8214	.8361	.9678	.9693	.6870	.6917	.0661	.0662
91,000	.8196	.8344	.9674	.9689	.6843	.6891	.0646	.0646
92,000	.8178	.8328	.9671	.9686	.6817	.6865	.0630	.0631
93,000	.8160	.8311	.9667	.9683	.6791	.6839	.0615	.0616
94,000	.8142	.8295	.9664	.9679	.6765	.6813	.0600	.0601
95,000	.8124	.8279	.9660	.9676	.6739	.6788	.0586	.0587
96,000	.8106	.8262	.9656	.9673	.6713	.6762	.0572	.0573
97,000	.8089	.8246	.9653	.9669	.6687	.6737	.0558	.0559
98,000	.8071	.8230	.9649	.9666	.6661	.6712	.0545	.0545
99,000	.8054	.8214	.9646	.9662	.6636	.6687	.0531	.0532
100,000	.8036	.8198	.9642	.9659	.6611	.6662	.0518	.0519
110,000	.7862	.8038	.9607	.9626	.6363	.6418	.0406	.0406

**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	.7692	.7882	.9572	.9592	.6128	.6186	.0317	.0318
130,000	.7526	.7730	.9538	.9559	.5902	.5964	.0248	.0249
140,000	.7363	.7580	.9503	.9526	.5686	.5751	.0198	.0198
150,000	.7205	.7435	.9468	.9493	.5480	.5548	.0161	.0161
160,000	.7050	.7293	.9433	.9460	.5283	.5354	.0133	.0134
170,000	.6900	.7155	.9399	.9427	.5095	.5169	.0113	.0114
180,000	.6752	.7020	.9364	.9394	.4916	.4992	.0098	.0099
190,000	.6608	.6887	.9330	.9361	.4744	.4823	.0086	.0087
200,000	.6468	.6759	.9296	.9329	.4580	.4662	.0077	.0077
210,000	.6332	.6634	.9262	.9296	.4424	.4507	.0069	.0069
220,000	.6199	.6512	.9228	.9264	.4274	.4360	.0062	.0063
230,000	.6068	.6392	.9194	.9231	.4131	.4219	.0056	.0057
240,000	.5938	.6272	.9160	.9200	.3995	.4085	.0051	.0052
250,000	.5812	.6156	.9128	.9168	.3865	.3957	.0046	.0047
260,000	.5687	.6042	.9095	.9137	.3740	.3834	.0042	.0043
270,000	.5565	.5930	.9062	.9106	.3622	.3718	.0039	.0040
280,000	.5446	.5821	.9029	.9075	.3509	.3607	.0036	.0037
290,000	.5330	.5715	.8997	.9044	.3401	.3500	.0033	.0034
300,000	.5218	.5611	.8964	.9013	.3298	.3399	.0031	.0032
315,000	.5053	.5460	.8916	.8967	.3151	.3254	.0028	.0029
330,000	.4893	.5313	.8868	.8921	.3014	.3119	.0026	.0026
345,000	.4742	.5175	.8821	.8876	.2886	.2993	.0023	.0024
360,000	.4595	.5040	.8774	.8831	.2765	.2874	.0021	.0022
375,000	.4453	.4909	.8727	.8787	.2652	.2762	.0019	.0020
390,000	.4315	.4783	.8681	.8742	.2545	.2657	.0018	.0018
405,000	.4185	.4664	.8635	.8699	.2444	.2558	.0016	.0017
420,000	.4058	.4547	.8589	.8655	.2349	.2464	.0015	.0016
440,000	.3891	.4394	.8528	.8597	.2231	.2348	.0013	.0014
460,000	.3732	.4249	.8468	.8539	.2122	.2240	.0011	.0012
480,000	.3576	.4105	.8407	.8482	.2020	.2140	.0010	.0011
500,000	.3426	.3967	.8348	.8425	.1925	.2046	.0008	.0009
520,000	.3286	.3840	.8290	.8370	.1836	.1960	.0007	.0008
540,000	.3152	.3721	.8231	.8314	.1754	.1880	.0006	.0007
560,000	.3024	.3610	.8172	.8259	.1677	.1806	.0005	.0006
580,000	.2903	.3506	.8115	.8204	.1604	.1738	.0005	.0006
600,000	.2786	.3409	.8058	.8149	.1537	.1674	.0004	.0005
630,000	.2615	.3273	.7973	.8068	.1445	.1587	.0003	.0004
660,000	.2455	.3148	.7890	.7987	.1361	.1508	.0002	.0004
700,000	.2258	.2998	.7784	.7881	.1260	.1413	.0001	.0003
750,000	.2039	.2830	.7652	.7750	.1150	.1310	.0001	.0003
800,000	.1848	.2682	.7523	.7621	.1056	.1221	.0000	.0002
850,000	.1681	.2549	.7396	.7495	.0974	.1142	.0000	.0002
900,000	.1527	.2430	.7276	.7370	.0903	.1073	.0000	.0001
1,000,000	.1294	.2225	.7049	.7129	.0784	.0956	.0000	.0001
1,100,000	.1140	.2054	.6832	.6896	.0689	.0862	.0000	.0001
1,200,000	.1035	.1909	.6627	.6673	.0612	.0784	.0000	.0001
1,300,000	.0936	.1785	.6428	.6458	.0549	.0719	.0000	.0000
1,400,000	.0848	.1677	.6243	.6252	.0497	.0663	.0000	.0000
1,500,000	.0774	.1582	.6064	.6055	.0454	.0616	.0000	.0000
1,600,000	.0706	.1498	.5892	.5866	.0417	.0574	.0000	.0000
1,700,000	.0640	.1424	.5726	.5684	.0385	.0538	.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	.0581	.1356	.5565	.5511	.0357	.0506	.0000	.0000
1,900,000	.0529	.1296	.5405	.5344	.0333	.0477	.0000	.0000
2,000,000	.0483	.1240	.5244	.5185	.0312	.0452	.0000	.0000
3,000,000	.0179	.0878	.3997	.3940	.0183	.0293	.0000	.0000
4,000,000	.0039	.0685	.3169	.3097	.0123	.0217	.0000	.0000
5,000,000	.0000	.0564	.2590	.2512	.0092	.0172	.0000	.0000
6,000,000	.0000	.0480	.2159	.2095	.0072	.0143	.0000	.0000
7,000,000	.0000	.0419	.1817	.1791	.0058	.0123	.0000	.0000
8,000,000	.0000	.0371	.1556	.1565	.0046	.0108	.0000	.0000
9,000,000	.0000	.0333	.1388	.1393	.0037	.0097	.0000	.0000
10,000,000	.0000	.0303	.1233	.1261	.0030	.0088	.0000	.0000

Pennsylvania Compensation Rating Bureau Cumulative Distribution of Loss By Type of Injury (2001-2003)

