

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 PCRIB's analysis considered loss distributions by type of injury based solely on Pennsylvania experience. Pages 6 through 8 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 9 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	455,034	240,453	\$ 96,855,756	\$ 96,855,756 1.0000	\$ 403
1,000	1,999	214,581	60,903	\$ 183,355,550	\$ 86,499,794 0.9872	\$ 1,420
2,000 -	2,999	153,678	26,640	\$ 248,459,278	\$ 65,103,728 0.9350	\$ 2,444
3,000 -	3,999	127,038	15,712	\$ 302,900,639	\$ 54,441,361 0.9166	\$ 3,465
4,000 -	4,999	111,326	10,659	\$ 350,595,174	\$ 47,694,535 0.9009	\$ 4,475
5,000 -	5,999	100,667	7,892	\$ 393,835,508	\$ 43,240,334 0.8869	\$ 5,479
6,000 -	6,999	92,775	6,500	\$ 435,956,206	\$ 42,120,698 0.8741	\$ 6,480
7,000 -	7,999	86,275	5,075	\$ 473,904,249	\$ 37,948,043 0.8622	\$ 7,477
8,000 -	8,999	81,200	4,375	\$ 511,004,913	\$ 37,100,664 0.8511	\$ 8,480
9,000 -	9,999	76,825	3,652	\$ 545,657,988	\$ 34,653,075 0.8407	\$ 9,489
10,000 -	10,999	73,173	3,232	\$ 579,556,328	\$ 33,898,340 0.8307	\$ 10,488
11,000 -	11,999	69,941	2,790	\$ 611,606,318	\$ 32,049,990 0.8213	\$ 11,487
12,000 -	12,999	67,151	2,710	\$ 645,456,228	\$ 33,849,910 0.8122	\$ 12,491
13,000 -	13,999	64,441	2,287	\$ 676,290,424	\$ 30,834,196 0.8035	\$ 13,482
14,000 -	14,999	62,154	2,154	\$ 707,498,038	\$ 31,207,614 0.7951	\$ 14,488
15,000 -	15,999	60,000	1,942	\$ 737,584,128	\$ 30,086,090 0.7870	\$ 15,492
16,000 -	16,999	58,058	1,782	\$ 766,988,067	\$ 29,403,939 0.7792	\$ 16,501
17,000 -	17,999	56,276	1,671	\$ 796,209,111	\$ 29,221,044 0.7716	\$ 17,487
18,000 -	18,999	54,605	1,563	\$ 825,123,547	\$ 28,914,436 0.7643	\$ 18,499
19,000 -	19,999	53,042	1,504	\$ 854,443,224	\$ 29,319,677 0.7571	\$ 19,494
20,000 -	20,999	51,538	1,347	\$ 882,058,657	\$ 27,615,433 0.7502	\$ 20,501
21,000 -	21,999	50,191	1,225	\$ 908,381,718	\$ 26,323,061 0.7435	\$ 21,488
22,000 -	22,999	48,966	1,184	\$ 935,013,220	\$ 26,631,502 0.7369	\$ 22,493
23,000 -	23,999	47,782	1,120	\$ 961,338,149	\$ 26,324,929 0.7305	\$ 23,504
24,000 -	24,999	46,662	1,058	\$ 987,265,713	\$ 25,927,564 0.7242	\$ 24,506
25,000 -	25,999	45,604	1,036	\$ 1,013,699,044	\$ 26,433,331 0.7181	\$ 25,515
26,000 -	26,999	44,568	938	\$ 1,038,557,029	\$ 24,857,985 0.7121	\$ 26,501
27,000 -	27,999	43,630	889	\$ 1,062,994,995	\$ 24,437,966 0.7063	\$ 27,489
28,000 -	28,999	42,741	857	\$ 1,087,405,915	\$ 24,410,920 0.7006	\$ 28,484
29,000 -	29,999	41,884	842	\$ 1,112,248,544	\$ 24,842,629 0.6950	\$ 29,504
30,000 -	30,999	41,042	887	\$ 1,139,287,067	\$ 27,038,523 0.6895	\$ 30,483
31,000 -	31,999	40,155	775	\$ 1,163,695,137	\$ 24,408,070 0.6841	\$ 31,494
32,000 -	32,999	39,380	822	\$ 1,190,410,467	\$ 26,715,330 0.6788	\$ 32,500
33,000 -	33,999	38,558	723	\$ 1,214,627,140	\$ 24,216,673 0.6737	\$ 33,495
34,000 -	34,999	37,835	711	\$ 1,239,159,586	\$ 24,532,446 0.6686	\$ 34,504
35,000 -	35,999	37,124	674	\$ 1,263,086,129	\$ 23,926,543 0.6636	\$ 35,499
36,000 -	36,999	36,450	606	\$ 1,285,211,350	\$ 22,125,221 0.6588	\$ 36,510
37,000 -	37,999	35,844	639	\$ 1,309,181,815	\$ 23,970,465 0.6540	\$ 37,512
38,000 -	38,999	35,205	641	\$ 1,333,876,909	\$ 24,695,094 0.6493	\$ 38,526
39,000 -	39,999	34,564	628	\$ 1,358,692,855	\$ 24,815,946 0.6446	\$ 39,516
40,000 -	40,999	33,936	525	\$ 1,379,945,361	\$ 21,252,506 0.6401	\$ 40,481
41,000 -	41,999	33,411	562	\$ 1,403,272,117	\$ 23,326,756 0.6356	\$ 41,507
42,000 -	42,999	32,849	521	\$ 1,425,411,668	\$ 22,139,551 0.6313	\$ 42,494
43,000 -	43,999	32,328	527	\$ 1,448,337,331	\$ 22,925,663 0.6269	\$ 43,502
44,000 -	44,999	31,801	498	\$ 1,470,496,173	\$ 22,158,842 0.6227	\$ 44,496
45,000 -	45,999	31,303	515	\$ 1,493,910,176	\$ 23,414,003 0.6185	\$ 45,464

PENNSYLVANIA
DISTRIBUTION OF LOSSES

LIMITS	ACCUMULATED CLAIMS (ADDED UP)	NUMBER OF CLAIMS	ACCUMULATED LOSSES (ADDED DOWN)	INDEMNITY AND MEDICAL	EXCESS RATIO	AVERAGE	
46,000 -	46,999	30,788	455	\$ 1,515,063,293	\$ 21,153,117	0.6144	\$ 46,490
47,000 -	47,999	30,333	460	\$ 1,536,910,398	\$ 21,847,105	0.6103	\$ 47,494
48,000 -	48,999	29,873	463	\$ 1,559,353,302	\$ 22,442,904	0.6064	\$ 48,473
49,000 -	49,999	29,410	403	\$ 1,579,303,583	\$ 19,950,281	0.6024	\$ 49,504
50,000 -	50,999	29,007	449	\$ 1,601,977,678	\$ 22,674,095	0.5986	\$ 50,499
51,000 -	51,999	28,558	394	\$ 1,622,275,899	\$ 20,298,221	0.5947	\$ 51,518
52,000 -	52,999	28,164	363	\$ 1,641,331,525	\$ 19,055,626	0.5910	\$ 52,495
53,000 -	53,999	27,801	370	\$ 1,661,125,165	\$ 19,793,640	0.5873	\$ 53,496
54,000 -	54,999	27,431	359	\$ 1,680,686,938	\$ 19,561,773	0.5836	\$ 54,490
55,000 -	55,999	27,072	346	\$ 1,699,887,920	\$ 19,200,982	0.5800	\$ 55,494
56,000 -	56,999	26,726	346	\$ 1,719,427,761	\$ 19,539,841	0.5764	\$ 56,474
57,000 -	57,999	26,380	346	\$ 1,739,316,582	\$ 19,888,821	0.5729	\$ 57,482
58,000 -	58,999	26,034	308	\$ 1,757,324,746	\$ 18,008,164	0.5695	\$ 58,468
59,000 -	59,999	25,726	327	\$ 1,776,773,690	\$ 19,448,944	0.5660	\$ 59,477
60,000 -	60,999	25,399	323	\$ 1,796,318,964	\$ 19,545,274	0.5626	\$ 60,512
61,000 -	61,999	25,076	305	\$ 1,815,082,580	\$ 18,763,616	0.5593	\$ 61,520
62,000 -	62,999	24,771	303	\$ 1,834,016,283	\$ 18,933,703	0.5560	\$ 62,487
63,000 -	63,999	24,468	314	\$ 1,853,958,133	\$ 19,941,850	0.5527	\$ 63,509
64,000 -	64,999	24,154	272	\$ 1,871,494,918	\$ 17,536,785	0.5495	\$ 64,473
65,000 -	65,999	23,882	273	\$ 1,889,375,106	\$ 17,880,188	0.5463	\$ 65,495
66,000 -	66,999	23,609	252	\$ 1,906,137,478	\$ 16,762,372	0.5432	\$ 66,517
67,000 -	67,999	23,357	265	\$ 1,924,034,844	\$ 17,897,366	0.5401	\$ 67,537
68,000 -	68,999	23,092	248	\$ 1,941,017,569	\$ 16,982,725	0.5370	\$ 68,479
69,000 -	69,999	22,844	267	\$ 1,959,574,701	\$ 18,557,132	0.5340	\$ 69,502
70,000 -	70,999	22,577	289	\$ 1,979,949,971	\$ 20,375,270	0.5309	\$ 70,503
71,000 -	71,999	22,288	233	\$ 1,996,604,911	\$ 16,654,940	0.5280	\$ 71,480
72,000 -	72,999	22,055	229	\$ 2,013,210,277	\$ 16,605,366	0.5250	\$ 72,513
73,000 -	73,999	21,826	215	\$ 2,029,012,366	\$ 15,802,089	0.5221	\$ 73,498
74,000 -	74,999	21,611	216	\$ 2,045,104,846	\$ 16,092,480	0.5192	\$ 74,502
75,000 -	75,999	21,395	230	\$ 2,062,468,019	\$ 17,363,173	0.5164	\$ 75,492
76,000 -	76,999	21,165	217	\$ 2,079,064,618	\$ 16,596,599	0.5136	\$ 76,482
77,000 -	77,999	20,948	204	\$ 2,094,876,907	\$ 15,812,289	0.5108	\$ 77,511
78,000 -	78,999	20,744	206	\$ 2,111,044,263	\$ 16,167,356	0.5080	\$ 78,482
79,000 -	79,999	20,538	218	\$ 2,128,370,799	\$ 17,326,536	0.5053	\$ 79,480
80,000 -	80,999	20,320	216	\$ 2,145,751,039	\$ 17,380,240	0.5026	\$ 80,464
81,000 -	81,999	20,104	181	\$ 2,160,508,701	\$ 14,757,662	0.4999	\$ 81,534
82,000 -	82,999	19,923	183	\$ 2,175,599,075	\$ 15,090,374	0.4973	\$ 82,461
83,000 -	83,999	19,740	197	\$ 2,192,057,948	\$ 16,458,873	0.4946	\$ 83,548
84,000 -	84,999	19,543	207	\$ 2,209,550,554	\$ 17,492,606	0.4920	\$ 84,505
85,000 -	85,999	19,336	170	\$ 2,224,084,680	\$ 14,534,126	0.4894	\$ 85,495
86,000 -	86,999	19,166	165	\$ 2,238,358,022	\$ 14,273,342	0.4869	\$ 86,505
87,000 -	87,999	19,001	176	\$ 2,253,759,914	\$ 15,401,892	0.4844	\$ 87,511
88,000 -	88,999	18,825	172	\$ 2,268,981,234	\$ 15,221,320	0.4819	\$ 88,496
89,000 -	89,999	18,653	146	\$ 2,282,050,598	\$ 13,069,364	0.4794	\$ 89,516
90,000 -	90,999	18,507	180	\$ 2,298,341,454	\$ 16,290,856	0.4769	\$ 90,505
91,000 -	91,999	18,327	154	\$ 2,312,429,895	\$ 14,088,441	0.4745	\$ 91,483
92,000 -	92,999	18,173	178	\$ 2,328,903,494	\$ 16,473,599	0.4721	\$ 92,548

PENNSYLVANIA
DISTRIBUTION OF LOSSES

LIMITS	ACCUMULATED CLAIMS (ADDED UP)	NUMBER OF CLAIMS	ACCUMULATED LOSSES (ADDED DOWN)	INDEMNITY AND MEDICAL	EXCESS RATIO	AVERAGE
93,000 -	93,999	17,995	\$ 2,343,868,666	\$ 14,965,172	0.4697	\$ 93,532
94,000 -	94,999	17,835	\$ 2,359,270,295	\$ 15,401,629	0.4673	\$ 94,489
95,000 -	95,999	17,672	\$ 2,372,161,061	\$ 12,890,766	0.4649	\$ 95,487
96,000 -	96,999	17,537	\$ 2,388,568,989	\$ 16,407,928	0.4626	\$ 96,517
97,000 -	97,999	17,367	\$ 2,399,978,356	\$ 11,409,367	0.4603	\$ 97,516
98,000 -	98,999	17,250	\$ 2,411,601,330	\$ 11,622,974	0.4580	\$ 98,500
99,000 -	99,999	17,132	\$ 2,427,125,131	\$ 15,523,801	0.4557	\$ 99,512
100,000 -	109,999	16,976	\$ 2,572,106,929	\$ 144,981,798	0.4535	\$ 104,831
110,000 -	119,999	15,593	\$ 2,710,360,507	\$ 138,253,578	0.4319	\$ 115,020
120,000 -	129,999	14,391	\$ 2,843,215,578	\$ 132,855,071	0.4120	\$ 124,864
130,000 -	139,999	13,327	\$ 2,971,277,408	\$ 128,061,830	0.3937	\$ 134,802
140,000 -	149,999	12,377	\$ 3,096,416,517	\$ 125,139,109	0.3767	\$ 144,837
150,000 -	159,999	11,513	\$ 3,225,803,633	\$ 129,387,116	0.3609	\$ 154,769
160,000 -	169,999	10,677	\$ 3,350,271,111	\$ 124,467,478	0.3462	\$ 164,858
170,000 -	179,999	9,922	\$ 3,468,948,128	\$ 118,677,017	0.3326	\$ 174,782
180,000 -	189,999	9,243	\$ 3,580,668,690	\$ 111,720,562	0.3199	\$ 184,968
190,000 -	199,999	8,639	\$ 3,685,531,009	\$ 104,862,319	0.3081	\$ 194,911
200,000 -	209,999	8,101	\$ 3,787,358,919	\$ 101,827,910	0.2970	\$ 204,885
210,000 -	219,999	7,604	\$ 3,884,074,677	\$ 96,715,758	0.2866	\$ 214,924
220,000 -	229,999	7,154	\$ 3,984,497,923	\$ 100,423,246	0.2768	\$ 225,164
230,000 -	239,999	6,708	\$ 4,070,002,887	\$ 85,504,964	0.2676	\$ 234,904
240,000 -	249,999	6,344	\$ 4,158,335,569	\$ 88,332,682	0.2590	\$ 244,689
250,000 -	259,999	5,983	\$ 4,242,951,777	\$ 84,616,208	0.2508	\$ 254,868
260,000 -	269,999	5,651	\$ 4,329,248,701	\$ 86,296,924	0.2431	\$ 264,714
270,000 -	279,999	5,325	\$ 4,407,033,896	\$ 77,785,195	0.2359	\$ 274,859
280,000 -	289,999	5,042	\$ 4,490,461,226	\$ 83,427,330	0.2290	\$ 284,735
290,000 -	299,999	4,749	\$ 4,564,954,764	\$ 74,493,538	0.2225	\$ 294,441
300,000 -	314,999	4,496	\$ 4,667,993,966	\$ 103,039,202	0.2164	\$ 307,580
315,000 -	329,999	4,161	\$ 4,763,826,841	\$ 95,832,875	0.2078	\$ 322,670
330,000 -	344,999	3,864	\$ 4,859,630,203	\$ 95,803,362	0.1998	\$ 337,336
345,000 -	359,999	3,580	\$ 4,962,222,112	\$ 102,591,909	0.1924	\$ 352,550
360,000 -	374,999	3,289	\$ 5,040,954,489	\$ 78,732,377	0.1856	\$ 367,908
375,000 -	389,999	3,075	\$ 5,129,193,064	\$ 88,238,575	0.1793	\$ 381,985
390,000 -	404,999	2,844	\$ 5,211,859,135	\$ 82,666,071	0.1734	\$ 397,433
405,000 -	419,999	2,636	\$ 5,293,483,787	\$ 81,624,652	0.1680	\$ 412,246
420,000 -	439,999	2,438	\$ 5,386,335,325	\$ 92,851,538	0.1629	\$ 429,868
440,000 -	459,999	2,222	\$ 5,475,724,577	\$ 89,389,252	0.1567	\$ 449,192
460,000 -	479,999	2,023	\$ 5,551,348,735	\$ 75,624,158	0.1511	\$ 469,715
480,000 -	499,999	1,862	\$ 5,610,647,130	\$ 59,298,395	0.1460	\$ 490,069
500,000 -	519,999	1,741	\$ 5,670,327,474	\$ 59,680,344	0.1412	\$ 510,088
520,000 -	539,999	1,624	\$ 5,739,247,629	\$ 68,920,155	0.1368	\$ 530,155
540,000 -	559,999	1,494	\$ 5,788,132,765	\$ 48,885,136	0.1326	\$ 549,271
560,000 -	579,999	1,405	\$ 5,845,133,594	\$ 57,000,829	0.1288	\$ 570,008
580,000 -	599,999	1,305	\$ 5,894,673,071	\$ 49,539,477	0.1252	\$ 589,756
600,000 -	629,999	1,221	\$ 5,963,587,134	\$ 68,914,063	0.1219	\$ 615,304
630,000 -	659,999	1,109	\$ 6,020,941,614	\$ 57,354,480	0.1172	\$ 644,432
660,000 -	699,999	1,020	\$ 6,099,833,926	\$ 78,892,312	0.1130	\$ 680,106

PENNSYLVANIA
DISTRIBUTION OF LOSSES

LIMITS	ACCUMULATED CLAIMS (ADDED UP)	NUMBER OF CLAIMS	ACCUMULATED LOSSES (ADDED DOWN)	INDEMNITY AND MEDICAL	EXCESS RATIO	AVERAGE
700,000 -	749,999	904	\$ 6,180,931,407	\$ 81,097,481	0.1079	\$ 724,085
750,000 -	799,999	792	\$ 6,261,311,090	\$ 80,379,683	0.1023	\$ 772,882
800,000 -	849,999	688	\$ 6,315,688,073	\$ 54,376,983	0.0974	\$ 823,894
850,000 -	899,999	622	\$ 6,368,329,830	\$ 52,641,757	0.0931	\$ 877,363
900,000 -	999,999	562	\$ 6,464,040,871	\$ 95,711,041	0.0892	\$ 947,634
1,000,000 -	1,099,999	461	\$ 6,535,545,856	\$ 71,504,985	0.0824	\$ 1,051,544
1,100,000 -	1,199,999	393	\$ 6,608,886,525	\$ 73,340,669	0.0767	\$ 1,145,948
1,200,000 -	1,299,999	329	\$ 6,659,893,640	\$ 51,007,115	0.0720	\$ 1,244,076
1,300,000 -	1,399,999	288	\$ 6,715,147,188	\$ 55,253,548	0.0679	\$ 1,347,648
1,400,000 -	1,499,999	247	\$ 6,764,525,840	\$ 49,378,652	0.0644	\$ 1,452,313
1,500,000 -	1,599,999	213	\$ 6,809,246,760	\$ 44,720,920	0.0613	\$ 1,542,101
1,600,000 -	1,699,999	184	\$ 6,839,001,949	\$ 29,755,189	0.0587	\$ 1,653,066
1,700,000 -	1,799,999	166	\$ 6,879,074,135	\$ 40,072,186	0.0564	\$ 1,742,269
1,800,000 -	1,899,999	143	\$ 6,902,986,337	\$ 23,912,202	0.0544	\$ 1,839,400
1,900,000 -	1,999,999	130	\$ 6,918,592,425	\$ 15,606,088	0.0526	\$ 1,950,761
2,000,000 -	2,999,999	122	\$ 7,037,464,660	\$ 118,872,235	0.0509	\$ 2,377,445
3,000,000 -	3,999,999	72	\$ 7,092,691,665	\$ 55,227,005	0.0389	\$ 3,451,688
4,000,000 -	4,999,999	56	\$ 7,169,642,941	\$ 76,951,276	0.0305	\$ 4,526,546
5,000,000 -	5,999,999	39	\$ 7,235,329,265	\$ 65,686,324	0.0242	\$ 5,473,860
6,000,000 -	6,999,999	27	\$ 7,247,670,775	\$ 12,341,510	0.0198	\$ 6,170,755
7,000,000 -	7,999,999	25	\$ 7,270,545,637	\$ 22,874,862	0.0165	\$ 7,624,954
8,000,000 -	8,999,999	22	\$ 7,312,632,554	\$ 42,086,917	0.0133	\$ 8,417,383
9,000,000 -	9,999,999	17	\$ 7,331,762,626	\$ 19,130,072	0.0108	\$ 9,565,036
10,000,000 -	AND GREATER	15	\$ 7,546,967,132	\$ 215,204,506	0.0086	\$ 14,346,967
GRAND TOTALS		455,034	EXCLUDING CONTRACT MEDICAL	\$ 7,546,967,132		\$ 16,586

**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 (<)					
				7,546,967,132		
0	10,000	545,657,988	381,861	6,269,579,144	1,429	.8307
10,000	15,000	161,840,050	13,173	5,939,469,094	12,286	.7870
15,000	20,000	146,945,186	8,462	5,661,763,908	17,365	.7502
20,000	25,000	132,822,489	5,934	5,419,601,419	22,383	.7181
25,000	30,000	124,982,831	4,562	5,203,458,588	27,396	.6895
30,000	35,000	126,911,042	3,918	5,008,467,546	32,392	.6636
35,000	40,000	119,533,269	3,188	4,830,834,277	37,495	.6401
40,000	50,000	220,610,728	4,929	4,517,313,549	44,758	.5986
50,000	75,000	465,801,263	7,612	3,897,237,286	61,193	.5164
75,000	100,000	382,020,285	4,419	3,422,242,001	86,449	.4535
100,000	125,000	349,662,912	3,117	3,037,804,089	112,179	.4025
125,000	150,000	319,628,475	2,346	2,723,600,615	136,244	.3609
150,000	175,000	313,193,103	1,931	2,460,420,012	162,234	.3260
175,000	200,000	275,921,390	1,482	2,241,236,123	186,245	.2970
200,000	225,000	248,755,291	1,170	2,053,205,832	212,611	.2721
225,000	250,000	224,049,269	948	1,892,881,563	236,339	.2508
250,000	275,000	209,805,730	800	1,753,363,333	262,421	.2323
275,000	300,000	196,813,466	688	1,633,212,368	286,274	.2164
300,000	325,000	166,927,785	533	1,527,109,583	313,185	.2023
325,000	350,000	161,944,957	480	1,434,089,626	337,385	.1900
350,000	375,000	147,126,983	408	1,352,887,643	360,605	.1793
375,000	400,000	143,349,289	370	1,280,530,021	387,780	.1697
400,000	425,000	132,392,894	321	1,217,070,460	412,011	.1613
425,000	450,000	114,333,280	262	1,160,812,181	437,221	.1538
450,000	475,000	101,412,745	220	1,110,955,686	460,444	.1472
475,000	500,000	78,204,435	161	1,065,820,002	484,989	.1412
500,000	600,000	284,025,941	520	919,694,061	546,204	.1219
600,000	700,000	205,160,855	317	814,333,206	647,195	.1079
700,000	800,000	161,477,164	216	735,256,042	747,579	.0974
800,000	900,000	107,018,740	126	672,837,302	849,355	.0892
900,000	1,000,000	95,711,041	101	621,926,261	947,634	.0824
1,000,000	2,000,000	454,551,554	339	384,374,707	1,340,860	.0509
2,000,000	3,000,000	118,872,235	50	293,502,472	2,377,445	.0389
3,000,000	4,000,000	55,227,005	16	230,275,467	3,451,688	.0305
4,000,000	5,000,000	76,951,276	17	182,324,191	4,526,546	.0242
5,000,000	6,000,000	65,686,324	12	149,637,867	5,473,860	.0198
6,000,000	7,000,000	12,341,510	2	124,296,357	6,170,755	.0165
7,000,000	8,000,000	22,874,862	3	100,421,495	7,624,954	.0133
8,000,000	9,000,000	42,086,917	5	81,334,578	8,417,383	.0108
9,000,000	10,000,000	19,130,072	2	65,204,506	9,565,036	.0086
10,000,000	& Over	215,204,506	15		14,346,967	
TOTAL/AVERAGE		7,546,967,132	455,034		16,586	

* 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	0.9985	0.9986	0.9999	0.9999	0.9946	0.9946	0.9690	0.9689	0.6458
2,000	0.9969	0.9972	0.9998	0.9998	0.9892	0.9893	0.9394	0.9392	0.4995
3,000	0.9954	0.9958	0.9996	0.9997	0.9839	0.9838	0.9113	0.9111	0.4125
4,000	0.9938	0.9945	0.9995	0.9996	0.9786	0.9785	0.8847	0.8845	0.3523
5,000	0.9924	0.9932	0.9994	0.9995	0.9734	0.9733	0.8597	0.8594	0.3074
6,000	0.9910	0.9919	0.9993	0.9993	0.9682	0.9680	0.8360	0.8357	0.2723
7,000	0.9896	0.9907	0.9992	0.9992	0.9630	0.9629	0.8135	0.8131	0.2440
8,000	0.9881	0.9894	0.9990	0.9991	0.9579	0.9577	0.7922	0.7917	0.2209
9,000	0.9868	0.9882	0.9989	0.9990	0.9529	0.9526	0.7718	0.7714	0.2014
10,000	0.9854	0.9869	0.9988	0.9989	0.9478	0.9476	0.7524	0.7519	0.1849
11,000	0.9840	0.9857	0.9987	0.9988	0.9429	0.9426	0.7338	0.7333	0.1706
12,000	0.9827	0.9845	0.9986	0.9987	0.9379	0.9376	0.7160	0.7154	0.1581
13,000	0.9813	0.9833	0.9984	0.9986	0.9330	0.9327	0.6989	0.6983	0.1470
14,000	0.9799	0.9821	0.9983	0.9985	0.9281	0.9278	0.6826	0.6820	0.1373
15,000	0.9786	0.9809	0.9982	0.9984	0.9233	0.9230	0.6669	0.6662	0.1286
16,000	0.9772	0.9797	0.9981	0.9983	0.9185	0.9181	0.6518	0.6511	0.1208
17,000	0.9759	0.9784	0.9980	0.9981	0.9138	0.9134	0.6372	0.6365	0.1138
18,000	0.9745	0.9772	0.9978	0.9980	0.9091	0.9087	0.6232	0.6225	0.1075
19,000	0.9732	0.9760	0.9977	0.9979	0.9044	0.9040	0.6097	0.6089	0.1017
20,000	0.9718	0.9748	0.9976	0.9978	0.8998	0.8993	0.5966	0.5959	0.0964
21,000	0.9705	0.9736	0.9975	0.9977	0.8952	0.8947	0.5841	0.5832	0.0915
22,000	0.9691	0.9724	0.9974	0.9976	0.8907	0.8901	0.5719	0.5710	0.0871
23,000	0.9678	0.9712	0.9972	0.9975	0.8862	0.8856	0.5601	0.5592	0.0829
24,000	0.9664	0.9700	0.9971	0.9974	0.8817	0.8811	0.5487	0.5478	0.0791
25,000	0.9651	0.9688	0.9970	0.9973	0.8772	0.8766	0.5376	0.5367	0.0755
26,000	0.9637	0.9676	0.9969	0.9972	0.8728	0.8722	0.5268	0.5259	0.0722
27,000	0.9624	0.9664	0.9968	0.9970	0.8685	0.8678	0.5164	0.5155	0.0690
28,000	0.9611	0.9652	0.9966	0.9969	0.8642	0.8635	0.5063	0.5053	0.0661
29,000	0.9597	0.9640	0.9965	0.9968	0.8598	0.8592	0.4965	0.4955	0.0634
30,000	0.9584	0.9629	0.9964	0.9967	0.8556	0.8549	0.4869	0.4859	0.0608
31,000	0.9571	0.9617	0.9963	0.9966	0.8513	0.8506	0.4776	0.4766	0.0585
32,000	0.9558	0.9605	0.9962	0.9965	0.8472	0.8464	0.4686	0.4675	0.0562
33,000	0.9545	0.9593	0.9960	0.9964	0.8430	0.8422	0.4598	0.4588	0.0541
34,000	0.9532	0.9582	0.9959	0.9963	0.8389	0.8381	0.4513	0.4502	0.0521
35,000	0.9519	0.9570	0.9958	0.9962	0.8347	0.8339	0.4430	0.4419	0.0503
36,000	0.9506	0.9559	0.9957	0.9961	0.8307	0.8298	0.4350	0.4339	0.0485
37,000	0.9493	0.9547	0.9956	0.9960	0.8266	0.8258	0.4272	0.4260	0.0468
38,000	0.9480	0.9536	0.9954	0.9958	0.8226	0.8217	0.4195	0.4184	0.0453
39,000	0.9468	0.9524	0.9953	0.9957	0.8186	0.8177	0.4121	0.4109	0.0438
40,000	0.9455	0.9513	0.9952	0.9956	0.8147	0.8138	0.4049	0.4037	0.0424
41,000	0.9442	0.9502	0.9951	0.9955	0.8107	0.8098	0.3978	0.3966	0.0411
42,000	0.9429	0.9490	0.9949	0.9954	0.8068	0.8059	0.3910	0.3898	0.0398
43,000	0.9417	0.9479	0.9948	0.9953	0.8030	0.8020	0.3843	0.3831	0.0387
44,000	0.9404	0.9468	0.9947	0.9952	0.7991	0.7982	0.3777	0.3765	0.0376
45,000	0.9392	0.9457	0.9946	0.9951	0.7953	0.7943	0.3714	0.3701	0.0365
46,000	0.9379	0.9446	0.9945	0.9950	0.7915	0.7905	0.3652	0.3639	0.0355
47,000	0.9367	0.9434	0.9943	0.9949	0.7878	0.7867	0.3592	0.3579	0.0345
48,000	0.9355	0.9423	0.9942	0.9948	0.7840	0.7830	0.3533	0.3520	0.0336
49,000	0.9342	0.9412	0.9941	0.9946	0.7803	0.7793	0.3475	0.3462	0.0327
50,000	0.9330	0.9401	0.9940	0.9945	0.7767	0.7756	0.3419	0.3406	0.0319
51,000	0.9318	0.9390	0.9939	0.9944	0.7730	0.7719	0.3364	0.3350	0.0311
52,000	0.9305	0.9379	0.9937	0.9943	0.7694	0.7683	0.3310	0.3297	0.0304
53,000	0.9293	0.9368	0.9936	0.9942	0.7658	0.7646	0.3257	0.3244	0.0296
54,000	0.9281	0.9357	0.9935	0.9941	0.7622	0.7611	0.3206	0.3192	0.0289
55,000	0.9268	0.9346	0.9934	0.9940	0.7587	0.7575	0.3156	0.3142	0.0282
56,000	0.9256	0.9335	0.9933	0.9939	0.7551	0.7539	0.3106	0.3093	0.0276
57,000	0.9244	0.9324	0.9931	0.9938	0.7516	0.7504	0.3058	0.3044	0.0269
58,000	0.9231	0.9313	0.9930	0.9937	0.7482	0.7469	0.3011	0.2997	0.0263

**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
59,000	0.9219	0.9302	0.9929	0.9935	0.7447	0.7435	0.2965	0.2951	0.0258
60,000	0.9207	0.9291	0.9928	0.9934	0.7413	0.7400	0.2920	0.2905	0.0252
61,000	0.9194	0.9280	0.9927	0.9933	0.7379	0.7366	0.2875	0.2861	0.0247
62,000	0.9182	0.9269	0.9925	0.9932	0.7345	0.7332	0.2832	0.2818	0.0241
63,000	0.9170	0.9258	0.9924	0.9931	0.7311	0.7298	0.2790	0.2775	0.0236
64,000	0.9158	0.9247	0.9923	0.9930	0.7277	0.7264	0.2748	0.2734	0.0232
65,000	0.9145	0.9237	0.9922	0.9929	0.7244	0.7231	0.2708	0.2693	0.0227
66,000	0.9133	0.9226	0.9921	0.9928	0.7211	0.7197	0.2668	0.2653	0.0223
67,000	0.9121	0.9215	0.9919	0.9927	0.7178	0.7164	0.2629	0.2614	0.0218
68,000	0.9109	0.9204	0.9918	0.9926	0.7145	0.7131	0.2591	0.2576	0.0214
69,000	0.9097	0.9193	0.9917	0.9925	0.7113	0.7099	0.2553	0.2538	0.0210
70,000	0.9085	0.9182	0.9916	0.9923	0.7081	0.7066	0.2516	0.2502	0.0206
71,000	0.9072	0.9171	0.9915	0.9922	0.7048	0.7034	0.2481	0.2466	0.0203
72,000	0.9060	0.9160	0.9913	0.9921	0.7017	0.7002	0.2445	0.2430	0.0199
73,000	0.9048	0.9150	0.9912	0.9920	0.6985	0.6970	0.2411	0.2396	0.0196
74,000	0.9036	0.9139	0.9911	0.9919	0.6953	0.6938	0.2377	0.2362	0.0192
75,000	0.9024	0.9128	0.9910	0.9918	0.6922	0.6907	0.2344	0.2328	0.0189
76,000	0.9012	0.9117	0.9909	0.9917	0.6891	0.6875	0.2311	0.2296	0.0186
77,000	0.8999	0.9106	0.9907	0.9916	0.6860	0.6844	0.2279	0.2264	0.0183
78,000	0.8987	0.9095	0.9906	0.9915	0.6829	0.6813	0.2247	0.2232	0.0180
79,000	0.8975	0.9084	0.9905	0.9914	0.6798	0.6783	0.2217	0.2201	0.0177
80,000	0.8963	0.9073	0.9904	0.9913	0.6768	0.6752	0.2186	0.2171	0.0174
81,000	0.8951	0.9063	0.9903	0.9911	0.6738	0.6722	0.2157	0.2141	0.0172
82,000	0.8938	0.9052	0.9901	0.9910	0.6707	0.6691	0.2127	0.2112	0.0169
83,000	0.8926	0.9041	0.9900	0.9909	0.6678	0.6661	0.2099	0.2083	0.0166
84,000	0.8914	0.9030	0.9899	0.9908	0.6648	0.6631	0.2070	0.2055	0.0164
85,000	0.8902	0.9019	0.9898	0.9907	0.6618	0.6602	0.2043	0.2027	0.0161
86,000	0.8890	0.9008	0.9897	0.9906	0.6589	0.6572	0.2015	0.2000	0.0159
87,000	0.8878	0.8997	0.9895	0.9905	0.6560	0.6543	0.1989	0.1973	0.0157
88,000	0.8866	0.8987	0.9894	0.9904	0.6530	0.6514	0.1962	0.1946	0.0155
89,000	0.8853	0.8976	0.9893	0.9903	0.6502	0.6484	0.1936	0.1920	0.0152
90,000	0.8841	0.8965	0.9892	0.9902	0.6473	0.6456	0.1911	0.1895	0.0150
91,000	0.8829	0.8954	0.9891	0.9900	0.6444	0.6427	0.1886	0.1869	0.0149
92,000	0.8817	0.8943	0.9889	0.9899	0.6416	0.6398	0.1861	0.1845	0.0147
93,000	0.8805	0.8932	0.9888	0.9898	0.6388	0.6370	0.1837	0.1820	0.0145
94,000	0.8793	0.8922	0.9887	0.9897	0.6359	0.6342	0.1813	0.1796	0.0143
95,000	0.8781	0.8911	0.9886	0.9896	0.6332	0.6314	0.1789	0.1773	0.0141
96,000	0.8769	0.8900	0.9885	0.9895	0.6304	0.6286	0.1766	0.1749	0.0140
97,000	0.8757	0.8890	0.9883	0.9894	0.6276	0.6258	0.1743	0.1727	0.0138
98,000	0.8745	0.8879	0.9882	0.9893	0.6249	0.6230	0.1721	0.1704	0.0137
99,000	0.8733	0.8868	0.9881	0.9892	0.6221	0.6203	0.1699	0.1682	0.0135
100,000	0.8722	0.8858	0.9880	0.9891	0.6194	0.6176	0.1677	0.1660	0.0134
110,000	0.8603	0.8752	0.9868	0.9880	0.5930	0.5910	0.1478	0.1461	0.0120
120,000	0.8486	0.8647	0.9856	0.9869	0.5680	0.5659	0.1309	0.1292	0.0109
130,000	0.8370	0.8544	0.9844	0.9858	0.5443	0.5420	0.1166	0.1149	0.0100
140,000	0.8255	0.8441	0.9832	0.9847	0.5218	0.5195	0.1043	0.1025	0.0091
150,000	0.8140	0.8338	0.9820	0.9836	0.5006	0.4982	0.0936	0.0917	0.0084
160,000	0.8026	0.8236	0.9808	0.9825	0.4807	0.4781	0.0843	0.0824	0.0078
170,000	0.7914	0.8136	0.9796	0.9814	0.4619	0.4592	0.0762	0.0743	0.0072
180,000	0.7801	0.8036	0.9784	0.9803	0.4441	0.4414	0.0692	0.0673	0.0067
190,000	0.7689	0.7936	0.9771	0.9792	0.4274	0.4246	0.0630	0.0611	0.0063
200,000	0.7579	0.7837	0.9759	0.9781	0.4116	0.4088	0.0576	0.0557	0.0059
210,000	0.7471	0.7740	0.9747	0.9770	0.3967	0.3938	0.0527	0.0508	0.0055
220,000	0.7364	0.7645	0.9735	0.9759	0.3827	0.3796	0.0483	0.0464	0.0052
230,000	0.7258	0.7551	0.9723	0.9748	0.3693	0.3662	0.0444	0.0424	0.0050
240,000	0.7155	0.7458	0.9711	0.9738	0.3567	0.3536	0.0408	0.0389	0.0047
250,000	0.7052	0.7366	0.9699	0.9727	0.3448	0.3416	0.0377	0.0357	0.0045
260,000	0.6952	0.7276	0.9687	0.9716	0.3334	0.3302	0.0348	0.0328	0.0044

**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
270,000	0.6851	0.7187	0.9675	0.9705	0.3227	0.3194	0.0322	0.0302	0.0042
280,000	0.6752	0.7098	0.9663	0.9694	0.3125	0.3092	0.0298	0.0278	0.0040
290,000	0.6654	0.7010	0.9651	0.9683	0.3029	0.2995	0.0278	0.0258	0.0038
300,000	0.6556	0.6923	0.9639	0.9672	0.2938	0.2903	0.0259	0.0239	0.0036
315,000	0.6413	0.6796	0.9621	0.9656	0.2809	0.2774	0.0233	0.0213	0.0033
330,000	0.6274	0.6671	0.9603	0.9639	0.2690	0.2654	0.0211	0.0190	0.0030
345,000	0.6140	0.6551	0.9585	0.9623	0.2578	0.2542	0.0191	0.0171	0.0028
360,000	0.6008	0.6434	0.9567	0.9606	0.2475	0.2438	0.0175	0.0154	0.0026
375,000	0.5877	0.6316	0.9549	0.9590	0.2379	0.2342	0.0160	0.0140	0.0024
390,000	0.5748	0.6201	0.9531	0.9573	0.2291	0.2253	0.0148	0.0127	0.0022
405,000	0.5623	0.6090	0.9513	0.9557	0.2208	0.2170	0.0136	0.0116	0.0021
420,000	0.5507	0.5986	0.9495	0.9541	0.2132	0.2093	0.0126	0.0106	0.0021
440,000	0.5358	0.5852	0.9471	0.9519	0.2038	0.1999	0.0114	0.0093	0.0020
460,000	0.5214	0.5724	0.9447	0.9497	0.1953	0.1914	0.0104	0.0083	0.0019
480,000	0.5075	0.5600	0.9423	0.9475	0.1875	0.1835	0.0095	0.0074	0.0018
500,000	0.4942	0.5481	0.9399	0.9453	0.1803	0.1763	0.0087	0.0065	0.0018
520,000	0.4814	0.5368	0.9375	0.9431	0.1736	0.1696	0.0079	0.0058	0.0017
540,000	0.4687	0.5262	0.9351	0.9409	0.1674	0.1633	0.0072	0.0052	0.0017
560,000	0.4563	0.5161	0.9326	0.9388	0.1617	0.1576	0.0066	0.0046	0.0016
580,000	0.4445	0.5066	0.9302	0.9366	0.1562	0.1522	0.0061	0.0041	0.0015
600,000	0.4333	0.4975	0.9278	0.9344	0.1512	0.1472	0.0057	0.0037	0.0015
630,000	0.4167	0.4846	0.9242	0.9311	0.1442	0.1402	0.0052	0.0032	0.0014
660,000	0.4007	0.4726	0.9206	0.9279	0.1379	0.1339	0.0048	0.0028	0.0013
700,000	0.3804	0.4579	0.9158	0.9235	0.1303	0.1263	0.0044	0.0023	0.0011
750,000	0.3568	0.4410	0.9098	0.9181	0.1220	0.1180	0.0039	0.0019	0.0010
800,000	0.3351	0.4258	0.9038	0.9127	0.1148	0.1107	0.0036	0.0015	0.0008
850,000	0.3149	0.4119	0.8978	0.9072	0.1085	0.1043	0.0032	0.0013	0.0007
900,000	0.2959	0.3991	0.8918	0.9018	0.1028	0.0985	0.0029	0.0011	0.0005
1,000,000	0.2608	0.3764	0.8797	0.8911	0.0932	0.0888	0.0024	0.0008	0.0002
1,100,000	0.2295	0.3569	0.8677	0.8804	0.0852	0.0808	0.0021	0.0006	0.0001
1,200,000	0.2033	0.3397	0.8557	0.8698	0.0786	0.0742	0.0017	0.0004	0.0000
1,300,000	0.1809	0.3246	0.8437	0.8593	0.0730	0.0686	0.0015	0.0003	0.0000
1,400,000	0.1639	0.3110	0.8316	0.8489	0.0682	0.0638	0.0012	0.0003	0.0000
1,500,000	0.1495	0.2988	0.8196	0.8386	0.0640	0.0596	0.0011	0.0002	0.0000
1,600,000	0.1373	0.2878	0.8076	0.8283	0.0605	0.0559	0.0010	0.0002	0.0000
1,700,000	0.1271	0.2777	0.7955	0.8182	0.0574	0.0527	0.0009	0.0002	0.0000
1,800,000	0.1179	0.2684	0.7835	0.8082	0.0548	0.0499	0.0008	0.0001	0.0000
1,900,000	0.1098	0.2599	0.7715	0.7983	0.0526	0.0473	0.0007	0.0001	0.0000
2,000,000	0.1022	0.2520	0.7595	0.7885	0.0506	0.0450	0.0006	0.0001	0.0000
3,000,000	0.0510	0.1962	0.6526	0.6986	0.0365	0.0303	0.0001	0.0000	0.0000
4,000,000	0.0319	0.1624	0.5480	0.6204	0.0274	0.0230	0.0000	0.0000	0.0000
5,000,000	0.0247	0.1391	0.4544	0.5531	0.0208	0.0186	0.0000	0.0000	0.0000
6,000,000	0.0175	0.1218	0.3791	0.4954	0.0169	0.0157	0.0000	0.0000	0.0000
7,000,000	0.0103	0.1082	0.3198	0.4457	0.0140	0.0136	0.0000	0.0000	0.0000
8,000,000	0.0031	0.0972	0.2648	0.4030	0.0112	0.0120	0.0000	0.0000	0.0000
9,000,000	0.0000	0.0880	0.2174	0.3660	0.0090	0.0108	0.0000	0.0000	0.0000
10,000,000	0.0000	0.0802	0.1748	0.3339	0.0072	0.0098	0.0000	0.0000	0.0000

Pennsylvania Compensation Rating Bureau Cumulative Distribution of Loss By Type of Injury (2017 - 2019)

