

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 PCRB'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	414,011	213,144	\$ 85,295,747	\$ 85,295,747	1.0000	\$	400
1,000	1,999	200,867	54,596	\$ 163,018,962	\$ 77,723,215	0.9884	\$	1,424
2,000 -	2,999	146,271	24,613	\$ 223,146,047	\$ 60,127,085	0.9383	\$	2,443
3,000 -	3,999	121,658	14,462	\$ 273,237,014	\$ 50,090,967	0.9203	\$	3,464
4,000 -	4,999	107,196	9,922	\$ 317,631,022	\$ 44,394,008	0.9049	\$	4,474
5,000 -	5,999	97,274	7,521	\$ 358,859,829	\$ 41,228,807	0.8910	\$	5,482
6,000 -	6,999	89,753	6,048	\$ 398,111,824	\$ 39,251,995	0.8784	\$	6,490
7,000 -	7,999	83,705	4,922	\$ 434,933,948	\$ 36,822,124	0.8666	\$	7,481
8,000 -	8,999	78,783	4,108	\$ 469,782,542	\$ 34,848,594	0.8556	\$	8,483
9,000 -	9,999	74,675	3,520	\$ 503,190,739	\$ 33,408,197	0.8452	\$	9,491
10,000 -	10,999	71,155	3,042	\$ 535,103,106	\$ 31,912,367	0.8354	\$	10,491
11,000 -	11,999	68,113	2,710	\$ 566,232,812	\$ 31,129,706	0.8259	\$	11,487
12,000 -	12,999	65,403	2,427	\$ 596,574,889	\$ 30,342,077	0.8169	\$	12,502
13,000 -	13,999	62,976	2,273	\$ 627,227,084	\$ 30,652,195	0.8082	\$	13,485
14,000 -	14,999	60,703	2,013	\$ 656,422,706	\$ 29,195,622	0.7998	\$	14,504
15,000 -	15,999	58,690	1,806	\$ 684,408,905	\$ 27,986,199	0.7917	\$	15,496
16,000 -	16,999	56,884	1,688	\$ 712,246,501	\$ 27,837,596	0.7839	\$	16,491
17,000 -	17,999	55,196	1,591	\$ 740,077,995	\$ 27,831,494	0.7763	\$	17,493
18,000 -	18,999	53,605	1,506	\$ 767,932,848	\$ 27,854,853	0.7689	\$	18,496
19,000 -	19,999	52,099	1,413	\$ 795,505,060	\$ 27,572,212	0.7618	\$	19,513
20,000 -	20,999	50,686	1,326	\$ 822,661,899	\$ 27,156,839	0.7548	\$	20,480
21,000 -	21,999	49,360	1,218	\$ 848,852,470	\$ 26,190,571	0.7480	\$	21,503
22,000 -	22,999	48,142	1,153	\$ 874,792,497	\$ 25,940,027	0.7414	\$	22,498
23,000 -	23,999	46,989	1,056	\$ 899,592,459	\$ 24,799,962	0.7350	\$	23,485
24,000 -	24,999	45,933	1,051	\$ 925,345,282	\$ 25,752,823	0.7287	\$	24,503
25,000 -	25,999	44,882	1,008	\$ 951,048,345	\$ 25,703,063	0.7225	\$	25,499
26,000 -	26,999	43,874	924	\$ 975,521,886	\$ 24,473,541	0.7165	\$	26,487
27,000 -	27,999	42,950	885	\$ 999,850,716	\$ 24,328,830	0.7106	\$	27,490
28,000 -	28,999	42,065	878	\$ 1,024,865,195	\$ 25,014,479	0.7048	\$	28,490
29,000 -	29,999	41,187	774	\$ 1,047,690,055	\$ 22,824,860	0.6992	\$	29,489
30,000 -	30,999	40,413	715	\$ 1,069,488,337	\$ 21,798,282	0.6937	\$	30,487
31,000 -	31,999	39,698	782	\$ 1,094,122,588	\$ 24,634,251	0.6883	\$	31,502
32,000 -	32,999	38,916	752	\$ 1,118,562,718	\$ 24,440,130	0.6829	\$	32,500
33,000 -	33,999	38,164	738	\$ 1,143,279,868	\$ 24,717,150	0.6777	\$	33,492
34,000 -	34,999	37,426	692	\$ 1,167,163,182	\$ 23,883,314	0.6726	\$	34,513
35,000 -	35,999	36,734	639	\$ 1,189,828,230	\$ 22,665,048	0.6676	\$	35,470
36,000 -	36,999	36,095	611	\$ 1,212,128,813	\$ 22,300,583	0.6626	\$	36,498
37,000 -	37,999	35,484	630	\$ 1,235,751,959	\$ 23,623,146	0.6578	\$	37,497
38,000 -	38,999	34,854	582	\$ 1,258,149,237	\$ 22,397,278	0.6530	\$	38,483
39,000 -	39,999	34,272	561	\$ 1,280,307,678	\$ 22,158,441	0.6483	\$	39,498
40,000 -	40,999	33,711	554	\$ 1,302,730,146	\$ 22,422,468	0.6437	\$	40,474
41,000 -	41,999	33,157	559	\$ 1,325,924,563	\$ 23,194,417	0.6392	\$	41,493
42,000 -	42,999	32,598	499	\$ 1,347,126,563	\$ 21,202,000	0.6347	\$	42,489
43,000 -	43,999	32,099	487	\$ 1,368,303,110	\$ 21,176,547	0.6303	\$	43,484
44,000 -	44,999	31,612	478	\$ 1,389,566,005	\$ 21,262,895	0.6260	\$	44,483
45,000 -	45,999	31,134	463	\$ 1,410,633,672	\$ 21,067,667	0.6218	\$	45,503

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 30,671	485	\$ 1,433,174,284	\$ 22,540,612	0.6176	\$ 46,475
47,000 -	47,999 30,186	438	\$ 1,453,988,826	\$ 20,814,542	0.6135	\$ 47,522
48,000 -	48,999 29,748	426	\$ 1,474,641,935	\$ 20,653,109	0.6094	\$ 48,481
49,000 -	49,999 29,322	412	\$ 1,495,029,246	\$ 20,387,311	0.6054	\$ 49,484
50,000 -	50,999 28,910	395	\$ 1,514,976,557	\$ 19,947,311	0.6015	\$ 50,500
51,000 -	51,999 28,515	379	\$ 1,534,487,667	\$ 19,511,110	0.5976	\$ 51,481
52,000 -	52,999 28,136	397	\$ 1,555,330,616	\$ 20,842,949	0.5937	\$ 52,501
53,000 -	53,999 27,739	413	\$ 1,577,424,243	\$ 22,093,627	0.5899	\$ 53,495
54,000 -	54,999 27,326	341	\$ 1,596,002,423	\$ 18,578,180	0.5862	\$ 54,481
55,000 -	55,999 26,985	345	\$ 1,615,148,404	\$ 19,145,981	0.5825	\$ 55,496
56,000 -	56,999 26,640	332	\$ 1,633,901,281	\$ 18,752,877	0.5789	\$ 56,485
57,000 -	57,999 26,308	338	\$ 1,653,328,282	\$ 19,427,001	0.5753	\$ 57,476
58,000 -	58,999 25,970	289	\$ 1,670,227,739	\$ 16,899,457	0.5718	\$ 58,476
59,000 -	59,999 25,681	349	\$ 1,690,992,327	\$ 20,764,588	0.5683	\$ 59,497
60,000 -	60,999 25,332	301	\$ 1,709,208,413	\$ 18,216,086	0.5648	\$ 60,519
61,000 -	61,999 25,031	293	\$ 1,727,228,610	\$ 18,020,197	0.5614	\$ 61,502
62,000 -	62,999 24,738	274	\$ 1,744,356,090	\$ 17,127,480	0.5580	\$ 62,509
63,000 -	63,999 24,464	303	\$ 1,763,594,798	\$ 19,238,708	0.5547	\$ 63,494
64,000 -	64,999 24,161	284	\$ 1,781,920,833	\$ 18,326,035	0.5514	\$ 64,528
65,000 -	65,999 23,877	257	\$ 1,798,767,796	\$ 16,846,963	0.5481	\$ 65,552
66,000 -	66,999 23,620	257	\$ 1,815,859,050	\$ 17,091,254	0.5449	\$ 66,503
67,000 -	67,999 23,363	305	\$ 1,836,439,523	\$ 20,580,473	0.5417	\$ 67,477
68,000 -	68,999 23,058	220	\$ 1,851,510,551	\$ 15,071,028	0.5386	\$ 68,505
69,000 -	69,999 22,838	278	\$ 1,870,829,102	\$ 19,318,551	0.5355	\$ 69,491
70,000 -	70,999 22,560	243	\$ 1,887,959,280	\$ 17,130,178	0.5324	\$ 70,495
71,000 -	71,999 22,317	257	\$ 1,906,339,616	\$ 18,380,336	0.5294	\$ 71,519
72,000 -	72,999 22,060	240	\$ 1,923,732,879	\$ 17,393,263	0.5264	\$ 72,472
73,000 -	73,999 21,820	249	\$ 1,942,033,410	\$ 18,300,531	0.5234	\$ 73,496
74,000 -	74,999 21,571	255	\$ 1,961,036,682	\$ 19,003,272	0.5204	\$ 74,523
75,000 -	75,999 21,316	210	\$ 1,976,898,345	\$ 15,861,663	0.5175	\$ 75,532
76,000 -	76,999 21,106	187	\$ 1,991,195,564	\$ 14,297,219	0.5147	\$ 76,456
77,000 -	77,999 20,919	220	\$ 2,008,240,608	\$ 17,045,044	0.5118	\$ 77,477
78,000 -	78,999 20,699	205	\$ 2,024,332,749	\$ 16,092,141	0.5090	\$ 78,498
79,000 -	79,999 20,494	213	\$ 2,041,268,850	\$ 16,936,101	0.5062	\$ 79,512
80,000 -	80,999 20,281	220	\$ 2,058,971,947	\$ 17,703,097	0.5034	\$ 80,469
81,000 -	81,999 20,061	185	\$ 2,074,046,340	\$ 15,074,393	0.5007	\$ 81,483
82,000 -	82,999 19,876	189	\$ 2,089,636,906	\$ 15,590,566	0.4980	\$ 82,490
83,000 -	83,999 19,687	202	\$ 2,106,501,317	\$ 16,864,411	0.4953	\$ 83,487
84,000 -	84,999 19,485	211	\$ 2,124,329,746	\$ 17,828,429	0.4927	\$ 84,495
85,000 -	85,999 19,274	199	\$ 2,141,339,451	\$ 17,009,705	0.4900	\$ 85,476
86,000 -	86,999 19,075	174	\$ 2,156,396,242	\$ 15,056,791	0.4874	\$ 86,533
87,000 -	87,999 18,901	180	\$ 2,172,138,439	\$ 15,742,197	0.4849	\$ 87,457
88,000 -	88,999 18,721	171	\$ 2,187,270,947	\$ 15,132,508	0.4823	\$ 88,494
89,000 -	89,999 18,550	166	\$ 2,202,127,534	\$ 14,856,587	0.4798	\$ 89,498
90,000 -	90,999 18,384	157	\$ 2,216,336,748	\$ 14,209,214	0.4773	\$ 90,505
91,000 -	91,999 18,227	155	\$ 2,230,516,885	\$ 14,180,137	0.4748	\$ 91,485
92,000 -	92,999 18,072	152	\$ 2,244,577,577	\$ 14,060,692	0.4723	\$ 92,505

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	17,920	158	\$	2,259,344,464	\$	14,766,887	0.4699	\$	93,461
94,000	-	94,999	17,762	143	\$	2,272,862,115	\$	13,517,651	0.4675	\$	94,529
95,000	-	95,999	17,619	150	\$	2,287,191,337	\$	14,329,222	0.4651	\$	95,528
96,000	-	96,999	17,469	137	\$	2,300,407,859	\$	13,216,522	0.4627	\$	96,471
97,000	-	97,999	17,332	142	\$	2,314,248,196	\$	13,840,337	0.4604	\$	97,467
98,000	-	98,999	17,190	162	\$	2,330,209,971	\$	15,961,775	0.4580	\$	98,529
99,000	-	99,999	17,028	147	\$	2,344,828,952	\$	14,618,981	0.4557	\$	99,449
100,000	-	109,999	16,881	1,323	\$	2,483,577,868	\$	138,748,916	0.4534	\$	104,874
110,000	-	119,999	15,558	1,166	\$	2,617,449,004	\$	133,871,136	0.4314	\$	114,812
120,000	-	129,999	14,392	1,097	\$	2,754,440,097	\$	136,991,093	0.4112	\$	124,878
130,000	-	139,999	13,295	959	\$	2,883,754,615	\$	129,314,518	0.3924	\$	134,843
140,000	-	149,999	12,336	842	\$	3,005,829,296	\$	122,074,681	0.3751	\$	144,982
150,000	-	159,999	11,494	763	\$	3,124,038,786	\$	118,209,490	0.3589	\$	154,927
160,000	-	169,999	10,731	744	\$	3,246,758,097	\$	122,719,311	0.3439	\$	164,945
170,000	-	179,999	9,987	695	\$	3,368,295,458	\$	121,537,361	0.3298	\$	174,874
180,000	-	189,999	9,292	595	\$	3,478,366,137	\$	110,070,679	0.3168	\$	184,993
190,000	-	199,999	8,697	557	\$	3,586,955,818	\$	108,589,681	0.3046	\$	194,955
200,000	-	209,999	8,140	549	\$	3,699,539,608	\$	112,583,790	0.2932	\$	205,071
210,000	-	219,999	7,591	445	\$	3,795,240,856	\$	95,701,248	0.2825	\$	215,059
220,000	-	229,999	7,146	428	\$	3,891,586,874	\$	96,346,018	0.2725	\$	225,108
230,000	-	239,999	6,718	426	\$	3,991,707,007	\$	100,120,133	0.2631	\$	235,024
240,000	-	249,999	6,292	351	\$	4,077,759,074	\$	86,052,067	0.2543	\$	245,163
250,000	-	259,999	5,941	388	\$	4,176,662,169	\$	98,903,095	0.2460	\$	254,905
260,000	-	269,999	5,553	312	\$	4,259,317,613	\$	82,655,444	0.2382	\$	264,921
270,000	-	279,999	5,241	324	\$	4,348,411,867	\$	89,094,254	0.2309	\$	274,982
280,000	-	289,999	4,917	267	\$	4,424,489,367	\$	76,077,500	0.2240	\$	284,934
290,000	-	299,999	4,650	272	\$	4,504,763,648	\$	80,274,281	0.2176	\$	295,126
300,000	-	314,999	4,378	333	\$	4,607,081,875	\$	102,318,227	0.2114	\$	307,262
315,000	-	329,999	4,045	318	\$	4,709,670,736	\$	102,588,861	0.2029	\$	322,606
330,000	-	344,999	3,727	276	\$	4,802,685,872	\$	93,015,136	0.1950	\$	337,011
345,000	-	359,999	3,451	261	\$	4,894,573,502	\$	91,887,630	0.1877	\$	352,060
360,000	-	374,999	3,190	235	\$	4,980,857,380	\$	86,283,878	0.1810	\$	367,165
375,000	-	389,999	2,955	224	\$	5,066,495,031	\$	85,637,651	0.1747	\$	382,311
390,000	-	404,999	2,731	198	\$	5,145,257,951	\$	78,762,920	0.1690	\$	397,793
405,000	-	419,999	2,533	169	\$	5,214,989,720	\$	69,731,769	0.1636	\$	412,614
420,000	-	439,999	2,364	201	\$	5,301,488,966	\$	86,499,246	0.1586	\$	430,345
440,000	-	459,999	2,163	201	\$	5,391,893,692	\$	90,404,726	0.1525	\$	449,775
460,000	-	479,999	1,962	143	\$	5,459,018,982	\$	67,125,290	0.1469	\$	469,408
480,000	-	499,999	1,819	142	\$	5,528,589,358	\$	69,570,376	0.1418	\$	489,932
500,000	-	519,999	1,677	115	\$	5,587,143,108	\$	58,553,750	0.1370	\$	509,163
520,000	-	539,999	1,562	112	\$	5,646,572,117	\$	59,429,009	0.1327	\$	530,616
540,000	-	559,999	1,450	96	\$	5,699,390,501	\$	52,818,384	0.1286	\$	550,192
560,000	-	579,999	1,354	74	\$	5,741,554,356	\$	42,163,855	0.1248	\$	569,782
580,000	-	599,999	1,280	80	\$	5,788,694,584	\$	47,140,228	0.1212	\$	589,253
600,000	-	629,999	1,200	111	\$	5,857,019,752	\$	68,325,168	0.1178	\$	615,542
630,000	-	659,999	1,089	109	\$	5,927,178,480	\$	70,158,728	0.1132	\$	643,658
660,000	-	699,999	980	122	\$	6,010,076,619	\$	82,898,139	0.1090	\$	679,493

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	858	105	\$ 6,085,977,499	\$	75,900,880	0.1040	\$ 722,866
750,000 -	799,999	753	93	\$ 6,158,138,488	\$	72,160,989	0.0986	\$ 775,925
800,000 -	849,999	660	69	\$ 6,214,951,773	\$	56,813,285	0.0938	\$ 823,381
850,000 -	899,999	591	67	\$ 6,273,351,950	\$	58,400,177	0.0896	\$ 871,644
900,000 -	999,999	524	85	\$ 6,354,065,093	\$	80,713,143	0.0858	\$ 949,566
1,000,000 -	1,099,999	439	78	\$ 6,435,563,597	\$	81,498,504	0.0793	\$ 1,044,853
1,100,000 -	1,199,999	361	54	\$ 6,497,612,125	\$	62,048,528	0.0739	\$ 1,149,047
1,200,000 -	1,299,999	307	48	\$ 6,558,054,621	\$	60,442,496	0.0694	\$ 1,259,219
1,300,000 -	1,399,999	259	37	\$ 6,607,861,731	\$	49,807,110	0.0655	\$ 1,346,138
1,400,000 -	1,499,999	222	27	\$ 6,647,094,454	\$	39,232,723	0.0623	\$ 1,453,064
1,500,000 -	1,599,999	195	12	\$ 6,665,779,409	\$	18,684,955	0.0594	\$ 1,557,080
1,600,000 -	1,699,999	183	23	\$ 6,703,728,774	\$	37,949,365	0.0569	\$ 1,649,972
1,700,000 -	1,799,999	160	16	\$ 6,731,797,839	\$	28,069,065	0.0545	\$ 1,754,317
1,800,000 -	1,899,999	144	15	\$ 6,759,704,516	\$	27,906,677	0.0525	\$ 1,860,445
1,900,000 -	1,999,999	129	13	\$ 6,784,989,156	\$	25,284,640	0.0506	\$ 1,944,972
2,000,000 -	2,999,999	116	46	\$ 6,892,985,464	\$	107,996,308	0.0490	\$ 2,347,746
3,000,000 -	3,999,999	70	21	\$ 6,964,836,313	\$	71,850,849	0.0373	\$ 3,421,469
4,000,000 -	4,999,999	49	12	\$ 7,019,905,763	\$	55,069,450	0.0295	\$ 4,589,121
5,000,000 -	5,999,999	37	9	\$ 7,069,011,715	\$	49,105,952	0.0235	\$ 5,456,217
6,000,000 -	6,999,999	28	7	\$ 7,115,522,176	\$	46,510,461	0.0191	\$ 6,644,352
7,000,000 -	7,999,999	21	2	\$ 7,130,871,358	\$	15,349,182	0.0157	\$ 7,674,591
8,000,000 -	8,999,999	19	4	\$ 7,165,189,111	\$	34,317,753	0.0129	\$ 8,579,438
9,000,000 -	9,999,999	15	3	\$ 7,194,473,005	\$	29,283,894	0.0106	\$ 9,761,298
10,000,000 -	AND GREATER	12	12	\$ 7,378,158,518	\$	183,685,513	0.0086	\$ 15,307,126
GRAND TOTALS			414,011	EXCLUDING CONTRACT MEDICAL	\$	7,378,158,518		\$ 17,821

**Pennsylvania Compensation Rating Bureau
Distribution of Losses**

<u>Excess Loss Limits *</u>		Loss	Number	Excess Loss	Average	Empirical
From	TO (<)	Amount	of Claims	Amount		Excess Ratio
				7,378,158,518		
0	10,000	503,190,739	342,856	6,163,417,779	1,468	.8354
10,000	15,000	153,231,967	12,465	5,841,385,812	12,293	.7917
15,000	20,000	139,082,354	8,004	5,568,933,458	17,377	.7548
20,000	25,000	129,840,222	5,804	5,330,763,236	22,371	.7225
25,000	30,000	122,344,773	4,469	5,118,078,463	27,376	.6937
30,000	35,000	119,473,127	3,679	4,925,305,336	32,474	.6676
35,000	40,000	113,144,496	3,023	4,749,410,840	37,428	.6437
40,000	50,000	214,721,568	4,801	4,437,629,272	44,724	.6015
50,000	75,000	466,007,436	7,594	3,818,421,836	61,365	.5175
75,000	100,000	383,792,270	4,435	3,345,229,566	86,537	.4534
100,000	125,000	341,115,599	3,038	2,961,776,467	112,301	.4014
125,000	150,000	319,884,746	2,350	2,648,229,222	136,150	.3589
150,000	175,000	301,697,482	1,855	2,383,719,240	162,684	.3231
175,000	200,000	279,429,041	1,500	2,163,202,700	186,348	.2932
200,000	225,000	256,458,047	1,208	1,975,044,653	212,300	.2677
225,000	250,000	234,345,209	991	1,815,149,444	236,473	.2460
250,000	275,000	226,105,666	862	1,677,568,778	262,304	.2274
275,000	300,000	200,898,908	701	1,559,994,870	286,589	.2114
300,000	325,000	170,710,801	545	1,456,959,069	313,231	.1975
325,000	350,000	157,840,633	469	1,367,443,436	336,547	.1853
350,000	375,000	147,542,298	409	1,289,176,138	360,739	.1747
375,000	400,000	138,146,264	356	1,219,554,874	388,051	.1653
400,000	425,000	117,610,887	285	1,158,200,236	412,308	.1570
425,000	450,000	110,076,798	251	1,103,342,189	438,117	.1495
450,000	475,000	95,546,331	208	1,054,914,608	459,910	.1430
475,000	500,000	86,351,699	178	1,011,069,160	485,804	.1370
500,000	600,000	260,105,226	477	869,463,934	545,294	.1178
600,000	700,000	221,382,035	342	767,481,899	647,316	.1040
700,000	800,000	148,061,869	198	692,020,030	747,787	.0938
800,000	900,000	115,213,462	136	633,206,568	847,158	.0858
900,000	1,000,000	80,713,143	85	585,093,425	949,566	.0793
1,000,000	2,000,000	430,924,063	323	361,169,362	1,334,130	.0490
2,000,000	3,000,000	107,996,308	46	275,173,054	2,347,746	.0373
3,000,000	4,000,000	71,850,849	21	217,322,205	3,421,469	.0295
4,000,000	5,000,000	55,069,450	12	173,252,755	4,589,121	.0235
5,000,000	6,000,000	49,105,952	9	141,146,803	5,456,217	.0191
6,000,000	7,000,000	46,510,461	7	115,636,342	6,644,352	.0157
7,000,000	8,000,000	15,349,182	2	95,287,160	7,674,591	.0129
8,000,000	9,000,000	34,317,753	4	77,969,407	8,579,438	.0106
9,000,000	10,000,000	29,283,894	3	63,685,513	9,761,298	.0086
10,000,000	& Over	183,685,513	12		15,307,126	
TOTAL/AVERAGE		7,378,158,518	414,011		17,821	

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

**PENNSYLVANIA
DISTRIBUTION OF LOSSES**

	Death-Pareto		PT-Lognormal		PP-Pareto		TT-Pareto		Med only
Loss Limit	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	0.9984	0.9987	0.9999	0.9999	0.9948	0.9948	0.9704	0.9704	0.6585
2,000	0.9968	0.9973	0.9998	0.9998	0.9896	0.9897	0.9420	0.9420	0.5134
3,000	0.9951	0.9960	0.9996	0.9997	0.9844	0.9845	0.9151	0.9150	0.4263
4,000	0.9935	0.9946	0.9995	0.9996	0.9793	0.9794	0.8895	0.8894	0.3656
5,000	0.9920	0.9933	0.9994	0.9995	0.9743	0.9743	0.8654	0.8653	0.3199
6,000	0.9904	0.9921	0.9993	0.9994	0.9692	0.9693	0.8425	0.8424	0.2840
7,000	0.9889	0.9908	0.9991	0.9993	0.9642	0.9643	0.8207	0.8206	0.2550
8,000	0.9874	0.9895	0.9990	0.9992	0.9592	0.9593	0.8000	0.7999	0.2311
9,000	0.9859	0.9883	0.9989	0.9991	0.9543	0.9544	0.7803	0.7801	0.2110
10,000	0.9844	0.9870	0.9988	0.9990	0.9494	0.9495	0.7614	0.7612	0.1938
11,000	0.9829	0.9858	0.9986	0.9989	0.9446	0.9447	0.7433	0.7431	0.1790
12,000	0.9815	0.9846	0.9985	0.9988	0.9397	0.9399	0.7259	0.7258	0.1661
13,000	0.9800	0.9834	0.9984	0.9987	0.9349	0.9351	0.7093	0.7091	0.1547
14,000	0.9785	0.9822	0.9983	0.9986	0.9302	0.9304	0.6933	0.6931	0.1445
15,000	0.9771	0.9810	0.9981	0.9985	0.9255	0.9257	0.6778	0.6777	0.1355
16,000	0.9756	0.9798	0.9980	0.9984	0.9208	0.9210	0.6630	0.6628	0.1274
17,000	0.9742	0.9786	0.9979	0.9983	0.9162	0.9164	0.6486	0.6484	0.1201
18,000	0.9728	0.9774	0.9978	0.9982	0.9116	0.9118	0.6348	0.6346	0.1135
19,000	0.9713	0.9762	0.9976	0.9981	0.9070	0.9072	0.6214	0.6212	0.1075
20,000	0.9699	0.9750	0.9975	0.9980	0.9024	0.9027	0.6085	0.6083	0.1020
21,000	0.9685	0.9738	0.9974	0.9979	0.8979	0.8982	0.5960	0.5958	0.0969
22,000	0.9670	0.9726	0.9973	0.9978	0.8935	0.8937	0.5839	0.5837	0.0922
23,000	0.9656	0.9714	0.9971	0.9977	0.8890	0.8893	0.5722	0.5720	0.0878
24,000	0.9642	0.9703	0.9970	0.9976	0.8846	0.8849	0.5609	0.5606	0.0838
25,000	0.9628	0.9691	0.9969	0.9975	0.8802	0.8805	0.5499	0.5496	0.0801
26,000	0.9614	0.9679	0.9968	0.9974	0.8759	0.8762	0.5392	0.5389	0.0766
27,000	0.9599	0.9667	0.9966	0.9973	0.8716	0.8719	0.5288	0.5285	0.0734
28,000	0.9585	0.9656	0.9965	0.9972	0.8673	0.8676	0.5187	0.5184	0.0704
29,000	0.9571	0.9644	0.9964	0.9971	0.8631	0.8634	0.5089	0.5086	0.0677
30,000	0.9557	0.9632	0.9963	0.9970	0.8588	0.8592	0.4994	0.4991	0.0651
31,000	0.9543	0.9621	0.9961	0.9969	0.8547	0.8550	0.4901	0.4898	0.0626
32,000	0.9529	0.9609	0.9960	0.9968	0.8505	0.8509	0.4810	0.4807	0.0604
33,000	0.9515	0.9597	0.9959	0.9966	0.8464	0.8467	0.4722	0.4719	0.0582
34,000	0.9501	0.9585	0.9958	0.9965	0.8423	0.8426	0.4636	0.4633	0.0562
35,000	0.9487	0.9574	0.9956	0.9964	0.8382	0.8386	0.4553	0.4550	0.0543
36,000	0.9473	0.9562	0.9955	0.9963	0.8341	0.8345	0.4472	0.4469	0.0525
37,000	0.9459	0.9551	0.9954	0.9962	0.8301	0.8305	0.4393	0.4390	0.0508
38,000	0.9445	0.9539	0.9953	0.9961	0.8261	0.8266	0.4316	0.4313	0.0492
39,000	0.9431	0.9527	0.9951	0.9960	0.8222	0.8226	0.4241	0.4238	0.0477
40,000	0.9418	0.9516	0.9950	0.9959	0.8182	0.8187	0.4168	0.4164	0.0463
41,000	0.9404	0.9505	0.9949	0.9958	0.8143	0.8148	0.4096	0.4093	0.0449
42,000	0.9390	0.9493	0.9948	0.9957	0.8104	0.8109	0.4027	0.4023	0.0437
43,000	0.9376	0.9482	0.9946	0.9956	0.8066	0.8070	0.3959	0.3956	0.0424
44,000	0.9363	0.9471	0.9945	0.9955	0.8028	0.8032	0.3893	0.3889	0.0413
45,000	0.9349	0.9459	0.9944	0.9954	0.7989	0.7994	0.3828	0.3825	0.0402
46,000	0.9336	0.9448	0.9943	0.9953	0.7952	0.7956	0.3765	0.3761	0.0391
47,000	0.9322	0.9437	0.9941	0.9952	0.7914	0.7919	0.3704	0.3700	0.0381
48,000	0.9309	0.9425	0.9940	0.9951	0.7877	0.7882	0.3643	0.3640	0.0372
49,000	0.9295	0.9414	0.9939	0.9950	0.7839	0.7844	0.3585	0.3581	0.0363
50,000	0.9281	0.9403	0.9938	0.9949	0.7802	0.7808	0.3527	0.3523	0.0354
51,000	0.9268	0.9392	0.9936	0.9948	0.7766	0.7771	0.3471	0.3467	0.0346
52,000	0.9254	0.9380	0.9935	0.9947	0.7729	0.7735	0.3416	0.3412	0.0338
53,000	0.9241	0.9369	0.9934	0.9946	0.7693	0.7699	0.3362	0.3358	0.0331
54,000	0.9227	0.9358	0.9933	0.9945	0.7657	0.7663	0.3310	0.3306	0.0323
55,000	0.9214	0.9347	0.9931	0.9944	0.7622	0.7627	0.3258	0.3254	0.0316
56,000	0.9200	0.9335	0.9930	0.9943	0.7586	0.7592	0.3208	0.3204	0.0309
57,000	0.9187	0.9324	0.9929	0.9942	0.7551	0.7557	0.3159	0.3155	0.0303
58,000	0.9173	0.9313	0.9928	0.9941	0.7516	0.7522	0.3111	0.3107	0.0296

**PENNSYLVANIA
DISTRIBUTION OF LOSSES**

	Death-Pareto		PT-Lognormal		PP-Pareto		TT-Pareto		Med only
Loss Limit	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	0.9160	0.9302	0.9926	0.9940	0.7481	0.7487	0.3064	0.3060	0.0290
60,000	0.9147	0.9291	0.9925	0.9939	0.7446	0.7452	0.3018	0.3013	0.0284
61,000	0.9133	0.9279	0.9924	0.9938	0.7412	0.7418	0.2972	0.2968	0.0279
62,000	0.9120	0.9268	0.9923	0.9937	0.7377	0.7384	0.2928	0.2924	0.0273
63,000	0.9106	0.9257	0.9921	0.9936	0.7343	0.7350	0.2885	0.2880	0.0268
64,000	0.9093	0.9246	0.9920	0.9935	0.7309	0.7316	0.2842	0.2838	0.0263
65,000	0.9080	0.9235	0.9919	0.9934	0.7276	0.7282	0.2800	0.2796	0.0258
66,000	0.9066	0.9224	0.9918	0.9933	0.7242	0.7249	0.2759	0.2755	0.0253
67,000	0.9053	0.9213	0.9916	0.9932	0.7209	0.7216	0.2719	0.2715	0.0249
68,000	0.9040	0.9202	0.9915	0.9931	0.7176	0.7183	0.2680	0.2676	0.0244
69,000	0.9026	0.9191	0.9914	0.9930	0.7143	0.7150	0.2642	0.2637	0.0240
70,000	0.9013	0.9180	0.9913	0.9929	0.7110	0.7117	0.2604	0.2599	0.0236
71,000	0.9000	0.9169	0.9911	0.9928	0.7078	0.7085	0.2567	0.2562	0.0232
72,000	0.8987	0.9158	0.9910	0.9927	0.7045	0.7052	0.2531	0.2526	0.0228
73,000	0.8973	0.9146	0.9909	0.9926	0.7013	0.7020	0.2495	0.2491	0.0225
74,000	0.8960	0.9135	0.9908	0.9925	0.6981	0.6988	0.2460	0.2456	0.0221
75,000	0.8947	0.9124	0.9906	0.9924	0.6950	0.6957	0.2426	0.2422	0.0217
76,000	0.8933	0.9113	0.9905	0.9923	0.6918	0.6925	0.2393	0.2388	0.0214
77,000	0.8920	0.9102	0.9904	0.9922	0.6887	0.6894	0.2360	0.2355	0.0211
78,000	0.8907	0.9091	0.9903	0.9921	0.6855	0.6863	0.2328	0.2323	0.0207
79,000	0.8894	0.9080	0.9901	0.9920	0.6824	0.6832	0.2296	0.2291	0.0204
80,000	0.8880	0.9069	0.9900	0.9919	0.6793	0.6801	0.2265	0.2260	0.0201
81,000	0.8867	0.9058	0.9899	0.9918	0.6763	0.6770	0.2234	0.2229	0.0198
82,000	0.8854	0.9047	0.9898	0.9917	0.6732	0.6740	0.2204	0.2199	0.0195
83,000	0.8841	0.9036	0.9896	0.9916	0.6702	0.6710	0.2175	0.2170	0.0192
84,000	0.8827	0.9025	0.9895	0.9915	0.6672	0.6680	0.2146	0.2141	0.0190
85,000	0.8814	0.9014	0.9894	0.9914	0.6642	0.6650	0.2117	0.2112	0.0187
86,000	0.8801	0.9003	0.9893	0.9913	0.6612	0.6620	0.2090	0.2085	0.0184
87,000	0.8788	0.8992	0.9891	0.9912	0.6582	0.6590	0.2062	0.2057	0.0181
88,000	0.8775	0.8981	0.9890	0.9911	0.6553	0.6561	0.2035	0.2030	0.0179
89,000	0.8761	0.8970	0.9889	0.9910	0.6523	0.6532	0.2009	0.2004	0.0177
90,000	0.8748	0.8959	0.9888	0.9909	0.6494	0.6502	0.1983	0.1978	0.0174
91,000	0.8735	0.8948	0.9886	0.9908	0.6465	0.6473	0.1958	0.1953	0.0172
92,000	0.8722	0.8937	0.9885	0.9907	0.6436	0.6445	0.1933	0.1927	0.0170
93,000	0.8709	0.8926	0.9884	0.9906	0.6407	0.6416	0.1908	0.1903	0.0168
94,000	0.8695	0.8915	0.9883	0.9905	0.6379	0.6387	0.1883	0.1878	0.0165
95,000	0.8682	0.8904	0.9881	0.9904	0.6350	0.6359	0.1860	0.1854	0.0163
96,000	0.8669	0.8893	0.9880	0.9903	0.6322	0.6331	0.1836	0.1831	0.0161
97,000	0.8656	0.8882	0.9879	0.9902	0.6294	0.6303	0.1813	0.1808	0.0159
98,000	0.8643	0.8872	0.9878	0.9900	0.6266	0.6275	0.1790	0.1785	0.0157
99,000	0.8630	0.8861	0.9876	0.9899	0.6238	0.6247	0.1767	0.1762	0.0156
100,000	0.8617	0.8850	0.9875	0.9898	0.6211	0.6220	0.1745	0.1740	0.0154
110,000	0.8489	0.8743	0.9863	0.9888	0.5942	0.5951	0.1541	0.1536	0.0138
120,000	0.8363	0.8638	0.9850	0.9878	0.5687	0.5697	0.1366	0.1361	0.0125
130,000	0.8240	0.8536	0.9838	0.9868	0.5445	0.5456	0.1217	0.1211	0.0114
140,000	0.8118	0.8435	0.9825	0.9858	0.5216	0.5228	0.1088	0.1082	0.0103
150,000	0.7998	0.8335	0.9813	0.9848	0.5000	0.5012	0.0975	0.0969	0.0094
160,000	0.7879	0.8236	0.9800	0.9838	0.4795	0.4807	0.0876	0.0870	0.0086
170,000	0.7761	0.8137	0.9788	0.9827	0.4601	0.4614	0.0789	0.0783	0.0078
180,000	0.7645	0.8040	0.9775	0.9817	0.4419	0.4433	0.0713	0.0707	0.0071
190,000	0.7530	0.7944	0.9763	0.9807	0.4248	0.4261	0.0645	0.0639	0.0065
200,000	0.7416	0.7850	0.9750	0.9797	0.4085	0.4099	0.0586	0.0579	0.0060
210,000	0.7304	0.7756	0.9738	0.9787	0.3932	0.3946	0.0532	0.0526	0.0054
220,000	0.7193	0.7663	0.9725	0.9777	0.3788	0.3803	0.0484	0.0478	0.0050
230,000	0.7084	0.7572	0.9713	0.9766	0.3651	0.3666	0.0441	0.0435	0.0046
240,000	0.6978	0.7484	0.9700	0.9756	0.3522	0.3537	0.0403	0.0396	0.0043
250,000	0.6875	0.7398	0.9688	0.9746	0.3400	0.3416	0.0368	0.0361	0.0041
260,000	0.6774	0.7314	0.9675	0.9736	0.3285	0.3301	0.0336	0.0329	0.0039

**PENNSYLVANIA
DISTRIBUTION OF LOSSES**

	Death-Pareto		PT-Lognormal		PP-Pareto		TT-Pareto		Med only
Loss Limit	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	0.6676	0.7232	0.9663	0.9726	0.3177	0.3193	0.0308	0.0301	0.0037
280,000	0.6579	0.7151	0.9650	0.9716	0.3074	0.3091	0.0282	0.0275	0.0035
290,000	0.6483	0.7070	0.9638	0.9706	0.2978	0.2994	0.0258	0.0251	0.0033
300,000	0.6389	0.6992	0.9625	0.9695	0.2886	0.2902	0.0237	0.0230	0.0031
315,000	0.6251	0.6876	0.9606	0.9680	0.2756	0.2773	0.0210	0.0203	0.0028
330,000	0.6114	0.6762	0.9588	0.9665	0.2636	0.2654	0.0187	0.0179	0.0026
345,000	0.5980	0.6649	0.9569	0.9650	0.2526	0.2543	0.0167	0.0159	0.0024
360,000	0.5847	0.6538	0.9550	0.9634	0.2423	0.2440	0.0149	0.0142	0.0021
375,000	0.5721	0.6432	0.9532	0.9619	0.2327	0.2345	0.0134	0.0126	0.0020
390,000	0.5598	0.6329	0.9513	0.9604	0.2238	0.2256	0.0121	0.0114	0.0018
405,000	0.5482	0.6231	0.9494	0.9589	0.2155	0.2174	0.0110	0.0102	0.0016
420,000	0.5370	0.6137	0.9475	0.9574	0.2078	0.2097	0.0101	0.0093	0.0015
440,000	0.5226	0.6016	0.9450	0.9553	0.1983	0.2002	0.0089	0.0081	0.0014
460,000	0.5091	0.5902	0.9425	0.9533	0.1896	0.1915	0.0079	0.0071	0.0013
480,000	0.4961	0.5793	0.9400	0.9513	0.1817	0.1836	0.0071	0.0063	0.0012
500,000	0.4836	0.5687	0.9375	0.9492	0.1743	0.1762	0.0064	0.0056	0.0011
520,000	0.4714	0.5585	0.9351	0.9472	0.1675	0.1695	0.0058	0.0049	0.0010
540,000	0.4594	0.5488	0.9327	0.9452	0.1612	0.1632	0.0053	0.0044	0.0009
560,000	0.4478	0.5396	0.9303	0.9431	0.1553	0.1574	0.0048	0.0039	0.0009
580,000	0.4361	0.5308	0.9279	0.9411	0.1498	0.1520	0.0044	0.0035	0.0008
600,000	0.4246	0.5224	0.9255	0.9391	0.1446	0.1469	0.0040	0.0032	0.0007
630,000	0.4074	0.5106	0.9219	0.9360	0.1374	0.1399	0.0036	0.0028	0.0006
660,000	0.3910	0.4995	0.9183	0.9330	0.1310	0.1336	0.0032	0.0024	0.0005
700,000	0.3707	0.4857	0.9135	0.9290	0.1234	0.1260	0.0029	0.0020	0.0004
750,000	0.3468	0.4699	0.9077	0.9239	0.1152	0.1176	0.0025	0.0016	0.0002
800,000	0.3255	0.4555	0.9020	0.9188	0.1080	0.1103	0.0022	0.0013	0.0001
850,000	0.3058	0.4423	0.8962	0.9138	0.1016	0.1038	0.0020	0.0011	0.0000
900,000	0.2868	0.4301	0.8904	0.9088	0.0960	0.0981	0.0018	0.0009	0.0000
1,000,000	0.2521	0.4084	0.8789	0.8987	0.0864	0.0883	0.0015	0.0007	0.0000
1,100,000	0.2202	0.3894	0.8674	0.8887	0.0787	0.0804	0.0013	0.0005	0.0000
1,200,000	0.1941	0.3726	0.8558	0.8788	0.0723	0.0737	0.0011	0.0004	0.0000
1,300,000	0.1732	0.3577	0.8443	0.8689	0.0668	0.0681	0.0010	0.0003	0.0000
1,400,000	0.1574	0.3443	0.8328	0.8591	0.0623	0.0633	0.0009	0.0003	0.0000
1,500,000	0.1455	0.3321	0.8212	0.8493	0.0583	0.0591	0.0008	0.0002	0.0000
1,600,000	0.1360	0.3210	0.8097	0.8397	0.0547	0.0555	0.0007	0.0002	0.0000
1,700,000	0.1290	0.3108	0.7982	0.8301	0.0515	0.0523	0.0007	0.0001	0.0000
1,800,000	0.1221	0.3014	0.7867	0.8206	0.0487	0.0494	0.0006	0.0001	0.0000
1,900,000	0.1159	0.2926	0.7757	0.8111	0.0462	0.0469	0.0005	0.0001	0.0000
2,000,000	0.1097	0.2845	0.7651	0.8018	0.0441	0.0446	0.0004	0.0001	0.0000
3,000,000	0.0626	0.2261	0.6594	0.7149	0.0306	0.0300	0.0000	0.0000	0.0000
4,000,000	0.0386	0.1896	0.5576	0.6379	0.0227	0.0227	0.0000	0.0000	0.0000
5,000,000	0.0308	0.1637	0.4660	0.5708	0.0171	0.0183	0.0000	0.0000	0.0000
6,000,000	0.0230	0.1442	0.3913	0.5125	0.0134	0.0154	0.0000	0.0000	0.0000
7,000,000	0.0153	0.1286	0.3261	0.4620	0.0108	0.0134	0.0000	0.0000	0.0000
8,000,000	0.0075	0.1158	0.2733	0.4182	0.0088	0.0118	0.0000	0.0000	0.0000
9,000,000	0.0000	0.1050	0.2264	0.3800	0.0073	0.0106	0.0000	0.0000	0.0000
10,000,000	0.0000	0.0958	0.1857	0.3467	0.0059	0.0096	0.0000	0.0000	0.0000

Pennsylvania Compensation Rating Bureau Cumulative Distribution of Loss By Type of Injury (2018 - 2020)

