

DELAWARE COMPENSATION RATING BUREAU, INC

State & Hazard Group Relativities

The attached exhibit pages present the application of a methodology previously provided to the DCRB by the NCCI for calculating State and Hazard Group relativities. The procedure compares Delaware severities with countrywide (NCCI states) severities.

Table I
 RUN DATE: 7/12/2007

Unweighted Countrywide Average Cost/Case for
 Serious Injury Type and Hazard Group

Injury Type	Hazard Group				Weighted Average
	I	II	III	IV	
Fatal	\$69,515	\$88,694	\$110,723	\$131,911	\$105,162
P.T.	\$197,844	\$214,883	\$293,551	\$352,559	\$264,007
Major	\$69,288	\$73,525	\$85,199	\$98,235	\$80,150

Differential to Unweighted Average

Injury Type	Hazard Group			
	I	II	III	IV
Fatal	0.661	0.843	1.053	1.254
P.T.	0.749	0.814	1.112	1.335
Major	0.864	0.917	1.063	1.226

Date: 7/12/2007

Countrywide Standard Earned Premium by Hazard Group

Hazard Group	Standard Premium	Ratio to Smallest Premium
I	\$324,495,944	1.000
II	\$23,444,564,742	0.014
III	\$25,372,947,368	0.013
IV	\$1,484,071,356	0.219
Total	\$50,626,079,410	

Table II

Countrywide Type of Injury Loss Distribution Table

Hazard Group	Fatal	P.T.	Major	Minor	T.T.	Medical
I	0.057	0.131	0.220	0.391	0.343	0.328
II	0.117	0.156	0.222	0.278	0.297	0.334
III	0.270	0.264	0.262	0.181	0.207	0.196
IV	0.556	0.449	0.296	0.150	0.153	0.142

DELAWARE
Proposed Effective: 12/1/07
Non-Escalating Fatal Benefits -- Non-Escalating PT/Major Benefits

Exhibit I

Premium Distribution By Hazard Group*

Hazard Group	(1) Standard Premium	(2) Total Standard Premium	(3) Ratio
I	47,933,455	669,474,004	0.072
II	303,207,542		0.453
III	250,659,869		0.374
IV	67,673,138		0.101

*Based on Unit Statistical Data.

Exhibit II

Distribution of Losses by Injury Type Derived from Hazard Group Premium Distribution & Countrywide Loss Distribution

Injury Type	I	Hazard Group II	III	IV
Fatal	0.019	0.247	0.472	0.262
P.T.	0.042	0.315	0.441	0.202
Major	0.065	0.412	0.401	0.122
Minor	0.119	0.531	0.286	0.064
T.T.	0.098	0.534	0.307	0.061
Medical	0.090	0.576	0.279	0.055

For each hazard group, the following procedure is utilized to obtain the distribution of losses within each injury type:

The percentage of countrywide losses by hazard group (see Table II) is multiplied by the corresponding statewide ratio of standard earned premium to total (Exhibit I). This is then divided by the sum of these calculations for all four hazard groups. This procedure is done for each injury type.

Exhibit III

Factors to Adjust Countrywide Differential to State Differential

(A) Injury Type

Fatal	0.949947
P.T.	0.973393
Major	0.998997

(B)

Injury Type	I	Hazard Group II	III	IV
Fatal	0.696	0.887	1.108	1.320
P.T.	0.769	0.836	1.142	1.371
Major	0.865	0.918	1.064	1.227

(C)

Injury Type	I	Hazard Group II	III	IV
P.T./Major	0.842	0.896	1.091	1.291
Serious	0.842	0.896	1.091	1.291

(A) For each serious injury type, the countrywide hazard group unweighted average cost per case differential (Table I) is multiplied times percent of premium (Exhibit I) in the hazard group for that state. These products are summed to form the factors in (A).

(B) For each hazard group the factors from Table I are divided by the appropriate injury type factor in section (A) of this exhibit.

(C) For P.T. and Major injury types, a combined (by hazard group) differential is derived by calculating a weighted average of the two differentials using the factors from Exhibit VII as weights.

Date: 7/12/2007

DELAWARE
Proposed Effective: 12/1/07
Non-Escalating Fatal Benefits -- Non-Escalating PT/Major Benefits

Exhibit IV Calculation of ELPF Trend

Policy Period	1/1/04-12/31/04	1/1/03-12/31/03	1/1/02-12/31/02
	First Report	Second Report	Third Report
(1) Proposed Effective Date of Filing		12/1/07	
(2a) Trend to		1/1/2008	
(2b) Midpoint of Policy Period	1/1/2005	1/1/2004	1/1/2003
(3) Benefit Level to Which Losses are Brought		6/7/2007	
(4a) Yrs. from (2a) to (2b)	3.0	4.0	5.0
(4b)			
(5) Indemnity Trend { $1.0088^{(4a)}$ }	1.0266	1.0357	1.0448
(6)			
(7)			
(8)			
(9)			
(10) Medical Trend { $1.1138^{(4a)}$ }	1.3817	1.5390	1.7141

Date: 7/12/2007

DELAWARE
Proposed Effective: 12/1/07
Policy Period: 1/1/04-12/31/04
Report: FIRST

Exhibit V - a

Excess Loss Premium Factor Calculation
Average Cost Per Case

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Type of Injury	Indemnity Losses	Amend. Factor	Trend in Ind Cost per Case	Indem Trended on Level (1)x(2)x(3)	Medical Losses	Amend. Factor	Medical Trend	Medical Trended on Level (5)x(6)x(7)	
A. Death	477,600	1.0554	1.0266	517,467	40,500	1.0000	1.3817	55,959	
B. P.T.	1,209,700	1.0888	1.0266	1,352,157	4,606,100	1.0000	1.3817	6,364,248	
C. Major	9,821,500	1.0818	1.0266	10,907,521	11,386,600	1.0000	1.3817	15,732,865	
D. Minor	10,662,000	1.0833	1.0266	11,857,378	13,687,400	1.0000	1.3817	18,911,881	
E. T.T.	10,729,000	1.0888	1.0266	11,992,469	21,437,300	1.0000	1.3817	29,619,917	
F. Med. Only					8,658,200	1.0000	1.3817	11,963,035	
G. Overall	32,899,800	XX	XX	36,626,992	59,816,100	1.0000	XX	82,647,905	
	(9) Total Losses (4)+(8)	(10) No. of Claims	(11) Average Severity (9)/(10)	(12) Severity Dev. to Ult. Rep	(13) Developed Severity (11)x(12)	(14) Case Development	(15) Indemnity Dev. to Ult. Rpt.	(16) Medical Dev. to Ult. Report	(17) Total Developed (4)x(15)+(8)x(16)
A. Death	573,426	3	191,142	2.8617	546,991	1.0000	2.7025	1.331 (a)	1,472,936
B. P.T.	7,716,405	3	357,883	2.6132	935,220	2.0000	5.6030	6.088 (a)	46,321,677
C. Major	26,640,386	93	63,969	1.2323	28,905	2.7634	4.7930	6.320 (a)	151,711,455
D. Minor	30,769,259	481	17,181	1.1053		1.2058	1.0507	1.828 (a)	47,029,466
E. T.T.	41,612,386	2,422				1.0194	0.8892	1.334 (a)	50,176,673
F. Med. Only	11,963,035	XX	XX	XX	XX	XX		1.000 (b)	11,963,035

(a) (14) x (MED DEV 5TH TO ULT)
(b) SELECTED

Date: 7/12/2007

DELAWARE
Proposed Effective: 12/1/07
Policy Period: 1/1/03-12/31/03
Report: SECOND

Exhibit V - b

Excess Loss Premium Factor Calculation
Average Cost Per Case

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Type of Injury	Indemnity Losses	Amend. Factor	Trend in Ind Cost per Case	Indem Trended on Level (1)x(2)x(3)	Medical Losses	Amend. Factor	Medical Trend	Medical Trended on Level (5)x(6)x(7)	
A. Death	682,000	1.0660	1.0357	752,966	1,700	1.0000	1.5390	2,616	
B. P.T.	319,300	1.1024	1.0357	364,563	1,884,100	1.0000	1.5390	2,899,630	
C. Major	22,899,900	1.0941	1.0357	25,949,236	19,391,000	1.0000	1.5390	29,842,749	
D. Minor	10,413,000	1.0958	1.0357	11,817,923	12,626,500	1.0000	1.5390	19,432,184	
E. T.T.	10,610,300	1.1024	1.0357	12,114,370	19,286,500	1.0000	1.5390	29,681,924	
F. Med. Only					9,024,100	1.0000	1.5390	13,888,090	
G. Overall	44,924,500	XX	XX	50,999,058	62,213,900	1.0000	xx	95,747,193	
	(9) Total Losses (4)+(8)	(10) No. of Claims	(11) Average Severity (9)/(10)	(12) Severity Dev. to Ult. Rep	(13) Developed Severity (11)x(12)	(14) Case Development	(15) Indemnity Dev. to Ult. Rpt.	(16) Medical Dev. to Ult. Report	(17) Total Developed (4)x(15)+(8)x(16)
A. Death	755,582	4	188,896	1.6021	302,630	1.0000	1.5351	1.331 (a)	1,159,360
B. P.T.	3,264,193	1	289,491	2.7065	783,507	6.0000	13.7121	18.265 (a)	57,960,666
C. Major	55,791,985	203				1.3350	2.0978	3.053 (a)	145,546,220
D. Minor	31,250,107	526	59,411	1.2878	29,199	1.1027	1.0596	1.672 (a)	45,012,883
E. T.T.	41,796,294	2,437	17,151	1.1071		0.9918	0.8883	1.298 (a)	49,288,332
F. Med. Only	13,888,090	XX	XX	XX	XX	XX		1.000 (b)	13,888,090

(a) (14) x (MED DEV 5TH TO ULT)

(b) SELECTED

Date: 7/12/2007

DELAWARE
Proposed Effective: 12/1/07
Policy Period: 1/1/02-12/31/02
Report: THIRD

Exhibit V - c

Excess Loss Premium Factor Calculation
Average Cost Per Case

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Type of Injury	Indemnity Losses	Amend. Factor	Trend in Ind Cost per Case	Indem Trended on Level (1)x(2)x(3)	Medical Losses	Amend. Factor	Medical Trend	Medical Trended on Level (5)x(6)x(7)	
A. Death	802,000	1.0868	1.0448	910,662	1,171,000	1.0000	1.7141	2,007,211	
B. P.T.	5,299,100	1.1314	1.0448	6,263,996	14,126,000	1.0000	1.7141	24,213,377	
C. Major	26,438,000	1.1208	1.0448	30,959,211	21,917,000	1.0000	1.7141	37,567,930	
D. Minor	9,342,600	1.1231	1.0448	10,962,746	11,788,400	1.0000	1.7141	20,206,496	
E. T.T.	12,561,500	1.1314	1.0448	14,848,782	20,869,000	1.0000	1.7141	35,771,553	
F. Med. Only					7,960,000	1.0000	1.7141	13,644,236	
G. Overall	54,443,200	XX	XX	63,945,397	77,831,400	1.0000	xx	133,410,803	
	(9) Total Losses (4)+(8)	(10) No. of Claims	(11) Average Severity (9)/(10)	(12) Severity Dev. to Ult. Rep	(13) Developed Severity (11)x(12)	(14) Case Development	(15) Indemnity Dev. to Ult. Rpt.	(16) Medical Dev. to Ult. Report	(17) Total Developed (4)x(15)+(8)x(16)
A. Death	2,917,873	6	486,312	2.0120	978,460	1.0000	2.6964	1.331 (a)	5,127,107
B. P.T.	30,477,373	6	454,149	2.2849	1,037,685	1.3333	1.8338	4.059 (a)	109,769,013
C. Major	68,527,141	212	57,087	1.4048		1.1226	1.6470	2.567 (a)	147,426,697
D. Minor	31,169,242	546	57,087	1.4048	32,078	1.0385	1.0997	1.575 (a)	43,880,963
E. T.T.	50,620,335	2,532	19,992	1.0855		0.9992	0.8987	1.308 (a)	60,133,792
F. Med. Only	13,644,236	XX	XX	XX	XX			1.000 (b)	13,644,236

(a) (14) x (MED DEV 5TH TO ULT)

(b) SELECTED

Date: 7/12/2007

DELAWARE
Proposed Effective: 12/1/07
Non-Escalating Fatal Benefits -- Non-Escalating PT/Major Benefits

Exhibit VI					Exhibit VII					
Adjusted Average Cost Per Case by Injury Types					Combined Injury Weights					
For Each Hazard Group					Hazard Group I			Hazard Group II		
I. * Injury Type	Average Cost Per Case	Indicated			Type of Injury	Total Incurred Losses	Injury Weights	Type of Injury	Total Incurred Losses	Injury Weights
Fatal	750,338	670,943			Death	147,429	0.002	Death	1,916,573	0.004
P.T. / Major	757,712	918,594			P.T.	8,990,157	0.122	P.T.	67,426,177	0.156
Minor/T.T.	31,727	30,094			Major	28,904,484	0.394	Major	183,209,961	0.423
					P.T./Major	37,894,641	0.516	P.T./Major	250,636,138	0.579
					Minor	16,174,874	0.220	Minor	72,175,279	0.167
					T.T.	15,640,682	0.213	T.T.	85,225,758	0.197
					Minor/T.T.	31,815,556	0.433	Minor/T.T.	157,401,037	0.364
II.** Injury Type	Hazard Group				Type of Injury	Total Incurred Losses	Injury Weights	Type of Injury	Total Incurred Losses	Injury Weights
	I	II	III	IV	Med. Only	3,554,582	XX	Med. Only	22,749,328	XX
Fatal	522,235	665,550	831,375	990,446	Total	73,412,208	XX	Total	432,703,076	XX
P.T./Major	637,994	678,910	826,664	978,206						
Minor/T.T.	31,727	31,727	31,727	31,727	Hazard Group III			Hazard Group IV		
					Type of Injury	Total Incurred Losses	Injury Weights	Type of Injury	Total Incurred Losses	Injury Weights
					Death	3,662,438	0.010	Death	2,032,964	0.017
					P.T.	94,396,648	0.252	P.T.	43,238,374	0.360
					Major	178,318,433	0.475	Major	54,251,493	0.452
					P.T./Major	272,715,081	0.727	P.T./Major	97,489,867	0.812
					Minor	38,874,067	0.104	Minor	8,699,092	0.072
					T.T.	48,996,831	0.131	T.T.	9,735,527	0.081
					Minor/T.T.	87,870,898	0.235	Minor/T.T.	18,434,619	0.153
					Med. Only	11,019,206	XX	Med. Only	2,172,245	XX
					Total	375,267,623	XX	Total	120,129,695	XX

* States overall developed average cost per case for each stated injury type, based upon latest three available years of U.S.P. data.

** Four sets of factors for each stated type (Exhibit III sections B and C) are multiplied by stated injury type average cost per case (Section I) for each hazard group in producing the adjusted figures in Section II of this exhibit.

Date: 7/12/2007

For each hazard group the following procedure is utilized to obtain the distribution of loss. The percentage of losses by injury type (Exhibit II) is multiplied by the corresponding injury type total incurred losses to achieve combined injury weights.

DELAWARE
State and Hazard Group Relativities
Proposed Effective: 12/1/07

Exhibit VIII

	(1) Severity	(2) Incurred Losses	(3) Calculated # Claims	(4) Average Severity	(5) Cred- ibility (a)	(6) NCCI Ave Sev (b)	(7) Delaware Cred Wtd Ave Sev	(8) Delaware Relativity (6T)/(7)	(9) Selected (c)
Injury									
Hazard Group I									
Fatal	522,235	147,429	0.3						
PT/Major	637,994	37,894,641	59.4						
TT/Minor	31,727	31,815,556	1,002.8						
Combined		69,857,626	1,062.5	65,748	0.08	37,928	40,154	1.283	1.283
Hazard Group II									
Fatal	665,550	1,916,573	2.9						
PT/Major	678,910	250,636,138	369.2						
TT/Minor	31,727	157,401,037	4,961.1						
Combined		409,953,748	5,333.2	76,868	0.19	47,067	52,729	0.977	0.977
Hazard Group III									
Fatal	831,375	3,662,438	4.4						
PT/Major	826,664	272,715,081	329.9						
TT/Minor	31,727	87,870,898	2,769.6						
Combined		364,248,417	3,103.9	117,352	0.14	64,356	71,775	0.718	0.718
Hazard Group IV									
Fatal	990,446	2,032,964	2.1						
PT/Major	978,206	97,489,867	99.7						
TT/Minor	31,727	18,434,619	581.0						
Combined		117,957,450	682.8	172,755	0.07	94,564	100,037	0.515	0.515
Total - All Hazard Groups									
Combined			10,182.4		0.26	51,533			

Notes:

- (a) Full credibility equals 155,000 claims. $Z = (\text{calculated \# claims} / 155,000) ^{0.5}$
- (b) Credibility weighted average severity of NCCI states underlying Table M expected loss group ranges.
- (c) Selected Relativities limited to a range from 0.500 to 2.000

Date: 7/12/2007