

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.

DELAWARE

State and Hazard Group Relativities

Proposed Effective: 12/1/05

Hazard Group	Proposed Relativities	Current Relativities	Percentage Change
I	1.345	1.354	-0.7%
II	1.043	1.108	-5.9%
III	0.697	0.738	-5.6%
IV	0.527	0.536	-1.7%

Table I
 RUN DATE: 7/1/05

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: 7/1/05

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: 12/1/05
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	1,724,681	519,313,552	0.003
II	271,218,276		0.522
III	233,012,080		0.449
IV	13,358,515		0.026

*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	0.001	0.310	0.616	0.073
P.T.	0.002	0.384	0.559	0.055
Major	0.003	0.479	0.486	0.032
Minor	0.005	0.627	0.351	0.017
T.T.	0.004	0.613	0.367	0.016
Medical	0.004	0.652	0.330	0.014

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	0.94743
P.T.	0.961153
Major	0.990429

(B)

Injury Type	I	Hazard Group II	III	IV
Fatal	0.698	0.890	1.111	1.324
P.T.	0.779	0.847	1.157	1.389
Major	0.872	0.926	1.073	1.238

(C)

Injury Type	I	Hazard Group II	III	IV
P.T./Major	0.851	0.906	1.101	1.303
Serious	0.850	0.905	1.101	1.304

(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: 7/1/05

DELAWARE
Proposed Effective: 12/1/05
Non-Escalating Fatal Benefits -- Non-Escalating PT/Major Benefits

Exhibit IV Calculation of ELPF Trend

Policy Period	1/1/02-12/31/02	1/1/01-12/31/01	1/1/00-12/31/00
	First Report	Second Report	Third Report
(1) Proposed Effective Date of Filing		12/1/05	
(2a) Trend to		7/1/05	
(2b) Midpoint of Policy Period	1/1/03	1/1/02	1/1/01
(3) Benefit Level to Which Losses are Brought		7/1/04	
(4a) Yrs. from (2a) to (2b)	2.5	3.5	4.5
(4b)			
(5) Indemnity Trend { $1.0389^{(4a)}$ }	1.1001	1.1429	1.1874
(6)			
(7)			
(8)			
(9)			
(10) Medical Trend { $1.1211^{(4a)}$ }	1.3308	1.4920	1.6726

Date: 7/1/05

DELAWARE
Proposed Effective: 12/1/05
Policy Period: 1/1/02-12/31/02
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	1,245,600	1.0496	1.1001	1,438,251	1,171,000	1.0000	1.3308	1,558,367	
B. P.T.	1,803,600	1.0750	1.1001	2,132,951	9,667,200	1.0000	1.3308	12,865,110	
C. Major	6,601,500	1.0691	1.1001	7,764,136	7,821,100	1.0000	1.3308	10,408,320	
D. Minor	7,867,400	1.0704	1.1001	9,264,234	9,639,600	1.0000	1.3308	12,828,380	
E. T.T.	14,217,100	1.0750	1.1001	16,813,249	22,501,000	1.0000	1.3308	29,944,331	
F. Med. Only					0	1.0000	1.3308	0	
G. Overall	31,735,200	XX	XX	37,412,821	50,799,900	1.0000	XX	67,604,508	
	(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	2,996,618	5	599,324	3.0997	1,857,725	1.0000	1.9385	1.595 (a)	5,273,645
B. P.T.	14,998,061	3	419,880	1.8407	772,873	2.0000	3.5835	7.572 (a)	105,058,043
C. Major	18,172,456	76				2.8289	5.1702	6.454 (a)	107,317,433
D. Minor	22,092,614	471	46,906	1.4809	29,741	1.1571	1.2129	1.898 (a)	35,584,855
E. T.T.	46,757,580	2,630	17,779	1.2727		1.0513	1.0521	1.517 (a)	63,114,769
F. Med. Only	0	XX	XX	XX	XX	XX		1.000 (b)	0

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

(b) SELECTED

Date: 7/1/05

DELAWARE
Proposed Effective: 12/1/05
Policy Period: 1/1/01-12/31/01
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	1,872,500	1.0661	1.1429	2,281,540	143,400	1.0000	1.4920	213,953	
B. P.T.	941,600	1.1012	1.1429	1,185,061	1,322,500	1.0000	1.4920	1,973,170	
C. Major	18,741,600	1.0931	1.1429	23,413,956	13,684,500	1.0000	1.4920	20,417,274	
D. Minor	7,671,800	1.0949	1.1429	9,600,193	8,709,900	1.0000	1.4920	12,995,171	
E. T.T.	15,185,200	1.1012	1.1429	19,111,508	21,444,300	1.0000	1.4920	31,994,896	
F. Med. Only					0	1.0000	1.4920	0	
G. Overall	44,412,700	XX	XX	55,592,258	45,304,600	1.0000	xx	67,594,464	
	(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	2,495,493	6	415,916	1.8405	765,493	1.0000	1.5239	1.595 (a)	3,818,094
B. P.T.	3,158,231	2	258,184	2.3685	611,509	3.0000	5.8143	11.358 (a)	29,301,565
C. Major	43,831,230	180				1.2444	1.9302	2.839 (a)	103,158,259
D. Minor	22,595,364	447	50,549	1.4476	31,294	1.0962	1.1967	1.798 (a)	34,853,868
E. T.T.	51,106,404	2,612	19,566	1.2331		1.0077	0.9743	1.454 (a)	65,140,921
F. Med. Only	0	XX	XX	XX	XX	XX		1.000 (b)	0

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

(b) SELECTED

Date: 7/1/05

DELAWARE
Proposed Effective: 12/1/05
Policy Period: 1/1/00-12/31/00
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	797,100	1.0844	1.1874	1,026,359	9,800	1.0000	1.6726	16,391	
B. P.T.	935,300	1.1292	1.1874	1,254,062	354,200	1.0000	1.6726	592,435	
C. Major	26,784,900	1.1186	1.1874	35,576,391	18,427,000	1.0000	1.6726	30,821,000	
D. Minor	7,134,400	1.1211	1.1874	9,497,271	7,856,500	1.0000	1.6726	13,140,782	
E. T.T.	15,760,800	1.1292	1.1874	21,132,271	21,387,400	1.0000	1.6726	35,772,565	
F. Med. Only					0	1.0000	1.6726	0	
G. Overall	51,412,500	XX	XX	68,486,354	48,034,900	1.0000	xx	80,343,173	
	(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	1,042,750	2	521,375	2.0544	1,071,113	1.0000	1.8541	1.595 (a)	1,929,116
B. P.T.	1,846,497	3	279,688	2.0248	566,312	2.0000	5.0966	7.572 (a)	10,877,370
C. Major	66,397,391	241				1.0415	1.3937	2.376 (a)	122,813,512
D. Minor	22,638,053	485	46,676	1.5171	31,192	1.0577	1.2179	1.735 (a)	34,365,983
E. T.T.	56,904,836	2,854	19,939	1.2267		1.0032	0.9741	1.448 (a)	72,383,619
F. Med. Only	0	XX	XX	XX	XX			1.000 (b)	0

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

(b) SELECTED

Date: 7/1/05

DELAWARE
Proposed Effective: 12/1/05
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	630,053	1,219,461			Death	11,021	0.004	Death	3,416,465	0.008
P.T. / Major	504,841	614,914			P.T.	290,474	0.111	P.T.	55,771,000	0.137
Minor/T.T.	26,303	30,751			Major	999,868	0.380	Major	159,645,529	0.392
					P.T./Major	1,290,342	0.491	P.T./Major	215,416,529	0.529
					Minor	524,024	0.199	Minor	65,712,551	0.161
					T.T.	802,557	0.305	T.T.	122,991,896	0.302
					Minor/T.T.	1,326,581	0.504	Minor/T.T.	188,704,447	0.463
II.** Injury Type	Hazard Group				Med. Only	0	XX	Med. Only	0	XX
	I	II	III	IV	Total	2,627,944	XX	Total	407,537,441	XX
Fatal	439,777	560,747	699,989	834,190						
P.T./Major	429,620	457,386	555,830	657,808						
Minor/T.T.	26,303	26,303	26,303	26,303						
					Hazard Group III			Hazard Group IV		
					Type of Injury	Total Incurred Losses	Injury Weights	Type of Injury	Total Incurred Losses	Injury Weights
					Death	6,788,847	0.019	Death	804,522	0.033
					P.T.	81,187,471	0.225	P.T.	7,988,034	0.327
					Major	161,978,553	0.449	Major	10,665,255	0.436
					P.T./Major	243,166,024	0.674	P.T./Major	18,653,289	0.763
					Minor	36,786,452	0.102	Minor	1,781,680	0.073
					T.T.	73,634,626	0.204	T.T.	3,210,229	0.131
					Minor/T.T.	110,421,078	0.306	Minor/T.T.	4,991,909	0.204
					Med. Only	0	XX	Med. Only	0	XX
					Total	360,375,949	XX	Total	24,449,720	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: 7/1/05

For each hazard group the following procedure is utilized to obtain the distribution of losses. 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: 12/1/05

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	439,777	11,021	0.0						
PT/Major	429,620	1,290,342	3.0						
TT/Minor	26,303	1,326,581	50.4						
Combined		2,627,944	53.4	49,212	0.02	25,738	26,207	1.345	1.345
Hazard Group II									
Fatal	560,747	3,416,465	6.1						
PT/Major	457,386	215,416,529	471.0						
TT/Minor	26,303	188,704,447	7,174.3						
Combined		407,537,441	7,651.4	53,263	0.22	28,311	33,800	1.043	1.043
Hazard Group III									
Fatal	699,989	6,788,847	9.7						
PT/Major	555,830	243,166,024	437.5						
TT/Minor	26,303	110,421,078	4,198.0						
Combined		360,375,949	4,645.2	77,580	0.17	45,018	50,554	0.697	0.697
Hazard Group IV									
Fatal	834,190	804,522	1.0						
PT/Major	657,808	18,653,289	28.4						
TT/Minor	26,303	4,991,909	189.8						
Combined		24,449,720	219.2	111,541	0.04	65,042	66,902	0.527	0.527
Total - All Hazard Groups									
Combined			12,569.2		0.28	35,243			

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: 7/1/05