

PENNSYLVANIA COMPENSATION RATING BUREAU

State and Hazard Group Relativities

The attached exhibit pages present an analysis of Pennsylvania State and Hazard Group relativities.

Page 1 shows the indicated State and Hazard Group Relativities for 7 Hazard Groups.

Page 2 shows the indicated State and Hazard Group Relativities for 4 Hazard Groups.

**Calculation of PA Hazard Group Relativities.**

Injury	(1) Incurred Losses	(2) # Claims	(3) Average Severity (1) / (2)	(4) NCCI Average Severity +	(5) Indicated Relativities (4T) / (3i)	(6) Adjusted Current Relativities Col(C) below	(7) Credibility ++	Credibility Weighted Relativities (5)*(7)+(6)*[1-(7)]
(i) Hazard Group A	347,492,978	8,403	41,353		1.40	1.46	0.2328	1.45
(ii) Hazard Group B	2,201,377,113	36,716	59,957		0.96	1.03	0.4867	1.00
(iii) Hazard Group C	4,465,858,036	69,055	64,671		0.89	0.88	0.6675	0.89
(iv) Hazard Group D	1,983,342,072	27,934	71,001		0.81	0.84	0.4245	0.83
(v) Hazard Group E	4,190,821,619	50,538	82,924		0.70	0.71	0.5710	0.70
(vi) Hazard Group F	2,693,690,651	24,276	110,961		0.52	0.56	0.3958	0.54
(vii) Hazard Group G	642,657,541	4,519	142,212		0.41	0.48	0.1707	0.47
Total - All Hazard Groups	16,525,240,010	221,441	74,626	57,797				

**Calculation of Current PA Adjusted Average Severities**

Injury	(A) PA Current Relativity	(B) Adjustment Factor #	(C) Adjusted Current Relativities (A) *(B)
(a) Hazard Group A	1.51	0.9699	1.46
(b) Hazard Group B	1.06	0.9699	1.03
(c) Hazard Group C	0.91	0.9699	0.88
(d) Hazard Group D	0.87	0.9699	0.84
(e) Hazard Group E	0.73	0.9699	0.71
(f) Hazard Group F	0.58	0.9699	0.56
(g) Hazard Group G	0.49	0.9699	0.48

Notes:

+ Countrywide Average Severity of NCCI states

++ Full credibility equals 155,000 claims for each Hazard Group.  $Z = (\text{calculated \# claims} / 155,000)^{0.5}$

# Change in Countrywide Overall Average Cost / Change in PA Overall Average Cost = 1.000 / 1.031

PENNSYLVANIA  
 State and Hazard Group Relativities  
 April 1, 2011 Filing

**Calculation of PA Hazard Group Relativities.**

Injury	(1) Incurred Losses	(2) # Claims	(3) Average Severity (1) / (2)	(4) NCCI Average Severity +	Weighted Relativities (From Page 1)
(i) Hazard Group 1	2,548,870,091	45,119	56,492		1.06
(ii) Hazard Group 2	6,449,200,108	96,989	66,494		0.87
(iii) Hazard Group 3	6,884,512,270	74,814	92,022		0.64
(iv) Hazard Group 4	642,657,541	4,519	142,212		0.47
Total - All Hazard Groups	16,525,240,010	221,441	74,626	57,797	

Notes:  
 + Countrywide Average Severity of NCCI states