

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.

**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 ++	(8) Credibility Weighted Relativities (5)*(7)+(6)*[1-(7)]
(i) Hazard Group A	247,829,960	6,393	38,766		1.54	1.57	0.2031	1.56
(ii) Hazard Group B	1,353,917,887	25,387	53,331		1.12	1.10	0.4047	1.11
(iii) Hazard Group C	2,685,647,836	44,430	60,447		0.99	1.02	0.5354	1.00
(iv) Hazard Group D	1,187,169,195	18,038	65,815		0.91	0.93	0.3411	0.92
(v) Hazard Group E	2,282,420,161	29,205	78,152		0.76	0.76	0.4341	0.76
(vi) Hazard Group F	1,378,189,527	12,838	107,352		0.56	0.54	0.2878	0.55
(vii) Hazard Group G	330,110,300	2,620	125,996		0.47	0.47	0.1300	0.47
Total - All Hazard Groups	9,465,284,866	138,911	68,139	59,736				

**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	1.0387	1.57
(b) Hazard Group B	1.06	1.0387	1.10
(c) Hazard Group C	0.98	1.0387	1.02
(d) Hazard Group D	0.90	1.0387	0.93
(e) Hazard Group E	0.73	1.0387	0.76
(f) Hazard Group F	0.52	1.0387	0.54
(g) Hazard Group G	0.45	1.0387	0.47

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 = 1.0000/0.9628