

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	254,484,637	7,030	36,200		1.66	1.67	0.2130	1.67
(ii) Hazard Group B	1,497,329,753	28,883	51,841		1.16	1.16	0.4317	1.16
(iii) Hazard Group C	2,784,627,156	50,387	55,265		1.09	1.09	0.5702	1.09
(iv) Hazard Group D	1,178,568,175	19,478	60,508		0.99	0.98	0.3545	0.98
(v) Hazard Group E	2,483,896,538	33,596	73,934		0.81	0.84	0.4656	0.83
(vi) Hazard Group F	1,572,734,597	15,300	102,793		0.58	0.60	0.3142	0.59
(vii) Hazard Group G	413,488,749	2,985	138,522		0.43	0.52	0.1388	0.51
Total - All Hazard Groups	10,185,129,605	157,659	64,602	60,093				

**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	1.62	1.0328	1.67
(b) Hazard Group B	1.12	1.0328	1.16
(c) Hazard Group C	1.06	1.0328	1.09
(d) Hazard Group D	0.95	1.0328	0.98
(e) Hazard Group E	0.81	1.0328	0.84
(f) Hazard Group F	0.58	1.0328	0.60
(g) Hazard Group G	0.50	1.0328	0.52

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 = 1.0148/0.9826