

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	256,231,175	6,625	38,676		1.53	1.64	0.2067	1.62
(ii) Hazard Group B	1,509,508,466	28,312	53,317		1.11	1.13	0.4274	1.12
(iii) Hazard Group C	2,710,415,523	49,353	54,919		1.08	1.04	0.5643	1.06
(iv) Hazard Group D	1,176,664,728	18,582	63,323		0.94	0.96	0.3462	0.95
(v) Hazard Group E	2,521,832,603	33,996	74,180		0.80	0.81	0.4683	0.81
(vi) Hazard Group F	1,667,265,574	15,529	107,365		0.55	0.59	0.3165	0.58
(vii) Hazard Group G	372,792,529	2,966	125,689		0.47	0.50	0.1383	0.50
Total - All Hazard Groups	10,214,710,598	155,363	65,747	59,215				

**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	1.49	1.0978	1.64
(b) Hazard Group B	1.03	1.0978	1.13
(c) Hazard Group C	0.95	1.0978	1.04
(d) Hazard Group D	0.87	1.0978	0.96
(e) Hazard Group E	0.74	1.0978	0.81
(f) Hazard Group F	0.54	1.0978	0.59
(g) Hazard Group G	0.46	1.0978	0.50

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 = 1.0583/0.9640