

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 seven Hazard Groups.

PENNSYLVANIA
 State and Hazard Group Relativities
 January 1, 2019 Filing

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	258,778,919	6,497	39,831		1.50	1.51	0.2047	1.51
(ii) Hazard Group B	1,430,083,989	25,569	55,930		1.07	1.06	0.4062	1.06
(iii) Hazard Group C	2,769,876,511	45,296	61,151		0.98	0.98	0.5406	0.98
(iv) Hazard Group D	1,203,011,255	18,331	65,627		0.91	0.90	0.3439	0.90
(v) Hazard Group E	2,448,646,584	29,544	82,881		0.72	0.74	0.4366	0.73
(vi) Hazard Group F	1,523,424,170	13,280	114,716		0.52	0.52	0.2927	0.52
(vii) Hazard Group G	361,588,919	2,716	133,133		0.45	0.45	0.1324	0.45
Total - All Hazard Groups	9,995,410,347	141,233	70,773	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	1.50	1.0092	1.51
(b) Hazard Group B	1.05	1.0092	1.06
(c) Hazard Group C	0.97	1.0092	0.98
(d) Hazard Group D	0.89	1.0092	0.90
(e) Hazard Group E	0.73	1.0092	0.74
(f) Hazard Group F	0.52	1.0092	0.52
(g) Hazard Group G	0.45	1.0092	0.45

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 = 1.0000/0.9909